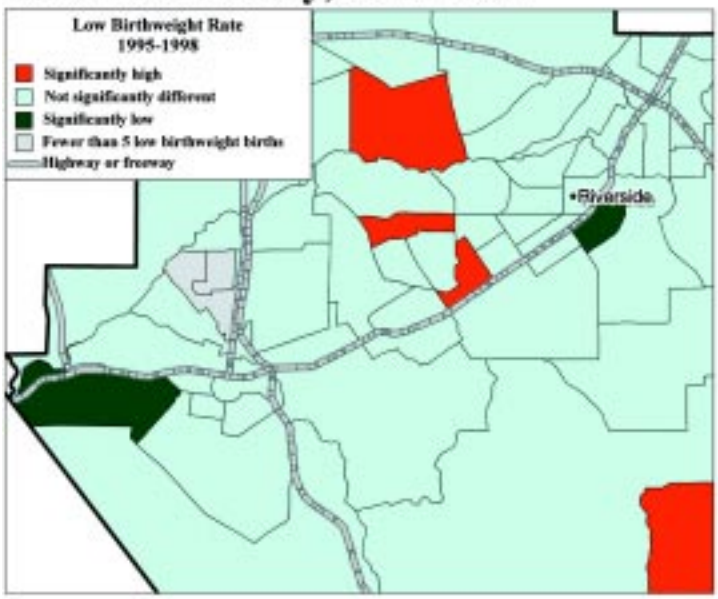
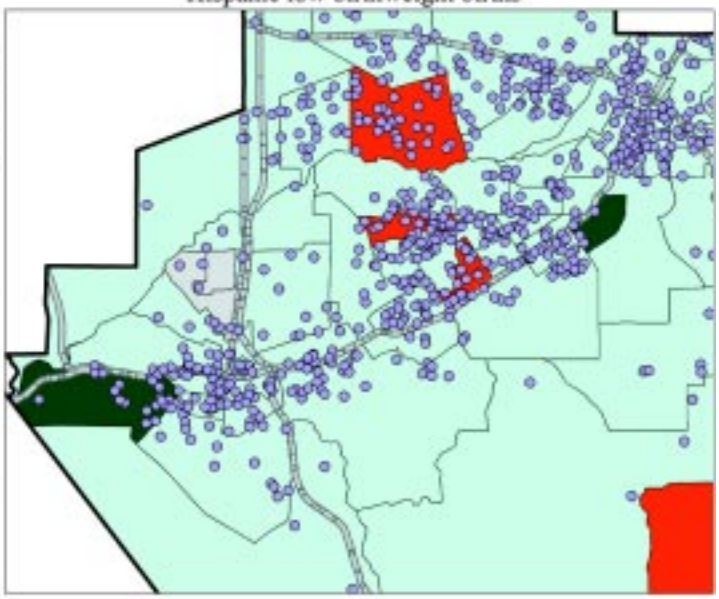
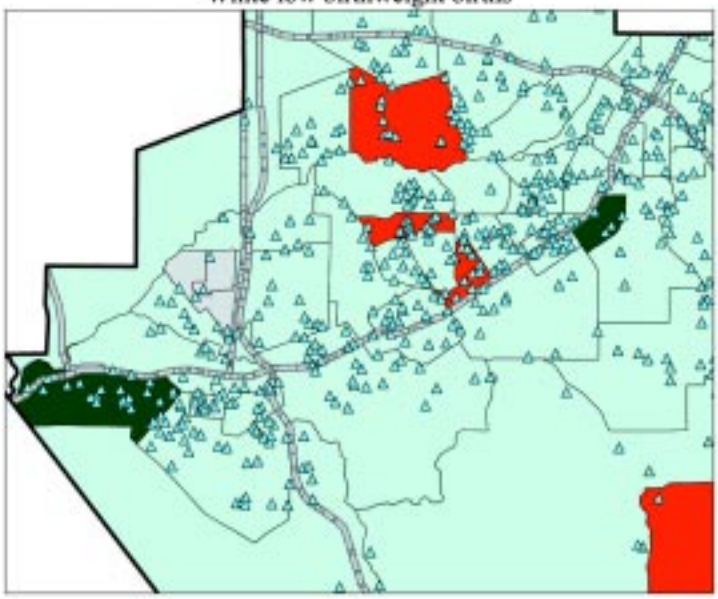
Riverside County, continued



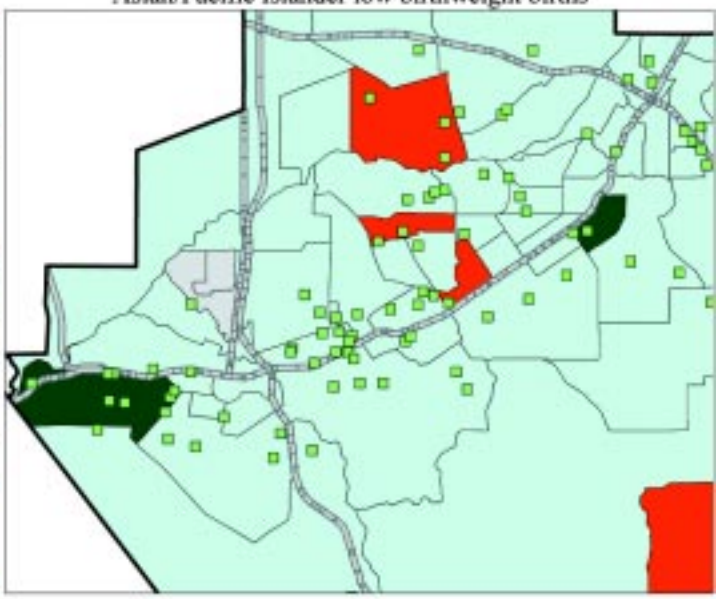
Hispanic low birthweight births



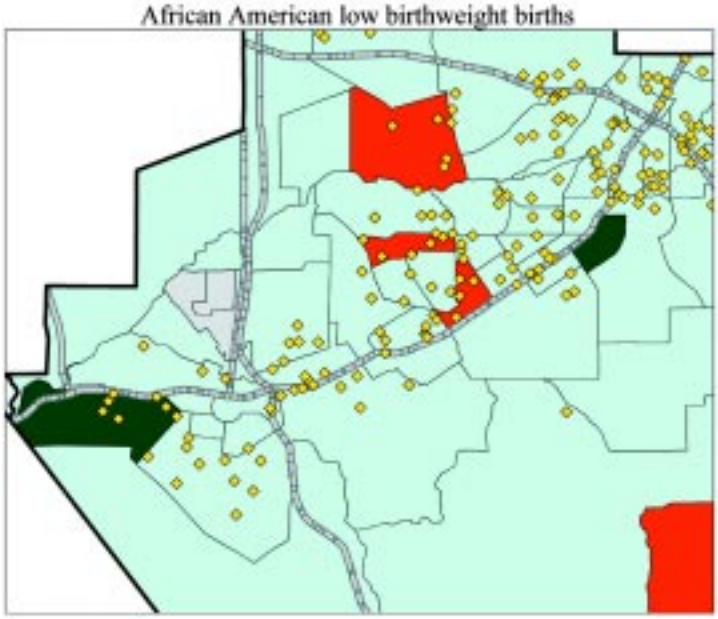
White low birthweight births



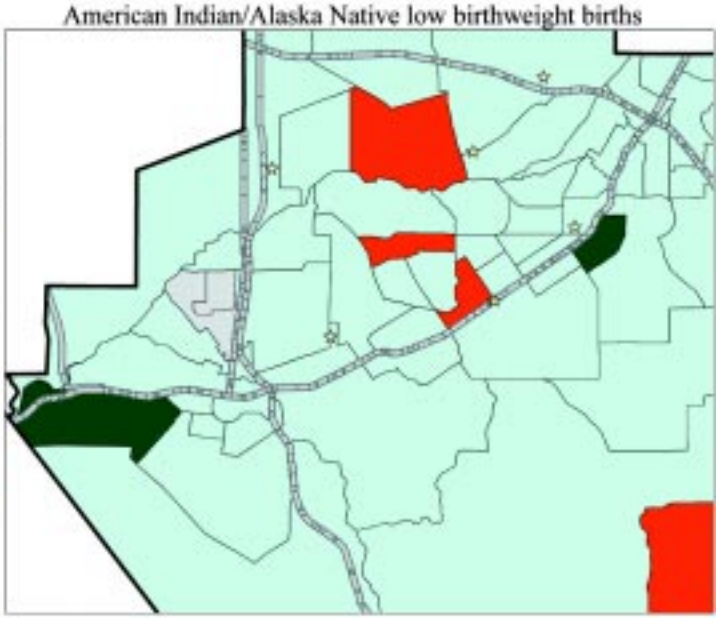
Asian/Pacific Islander low birthweight births



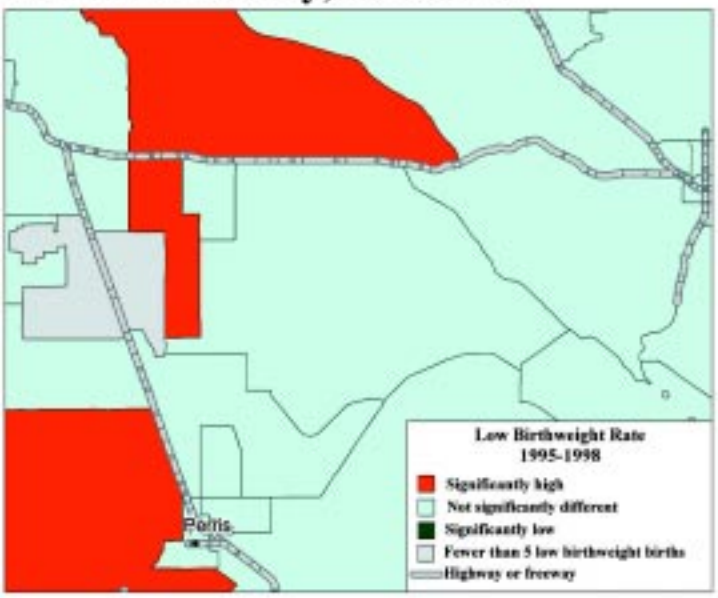
African American low birthweight births



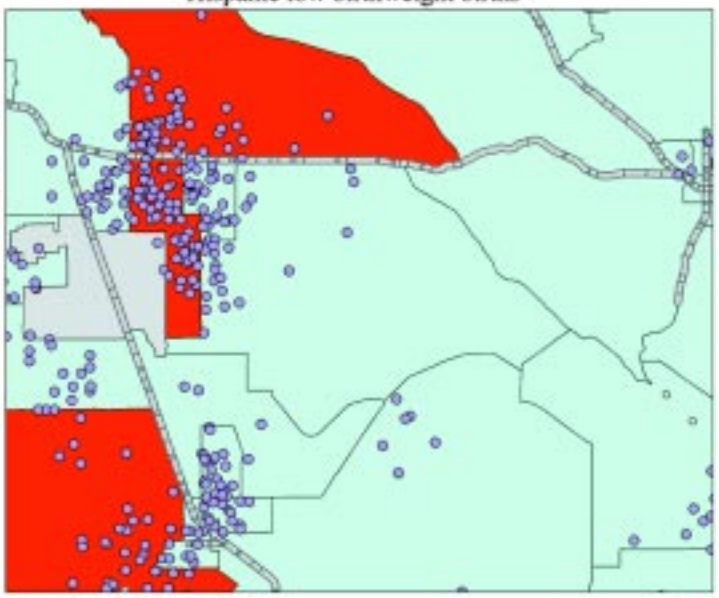
American Indian/Alaska Native low birthweight births



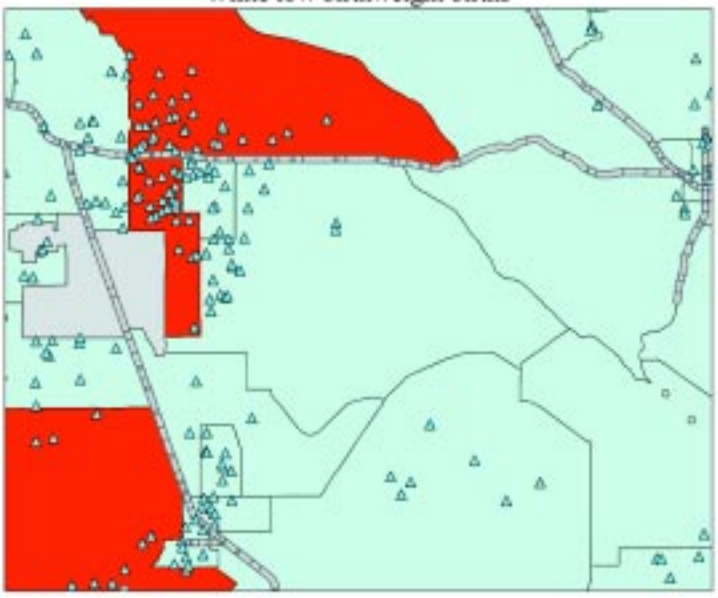
Riverside County, continued



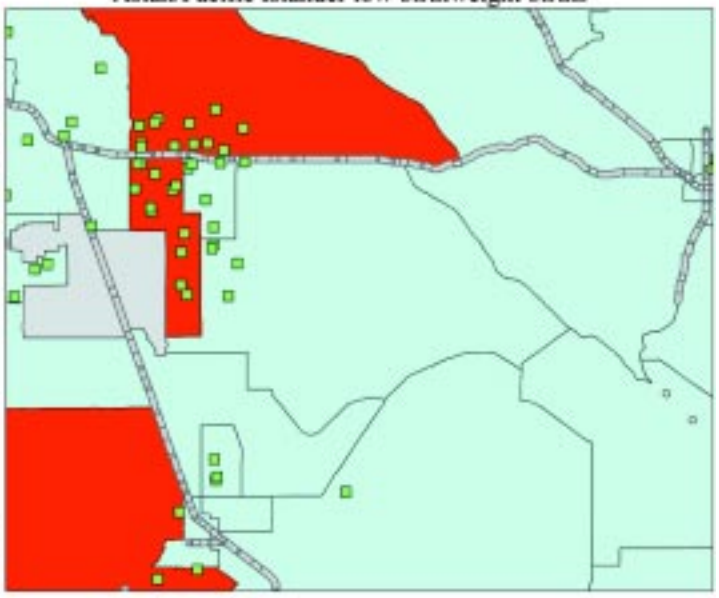
Hispanic low birthweight births



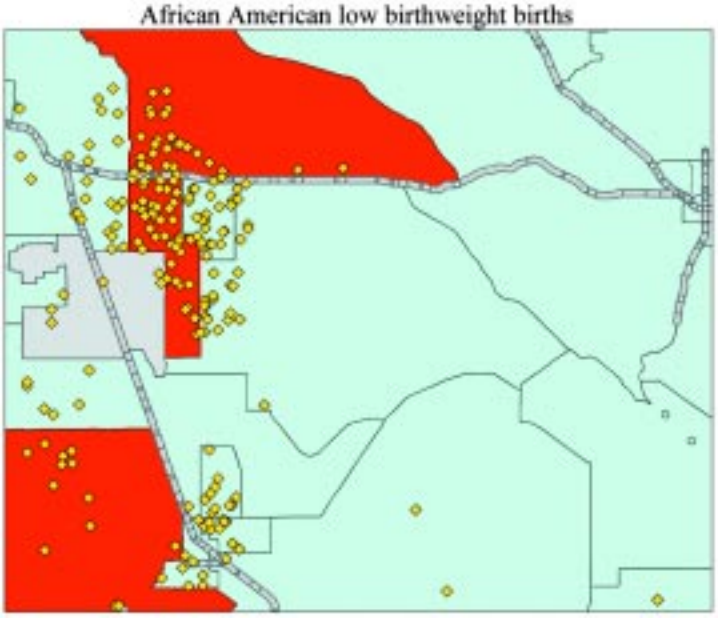
White low birthweight births



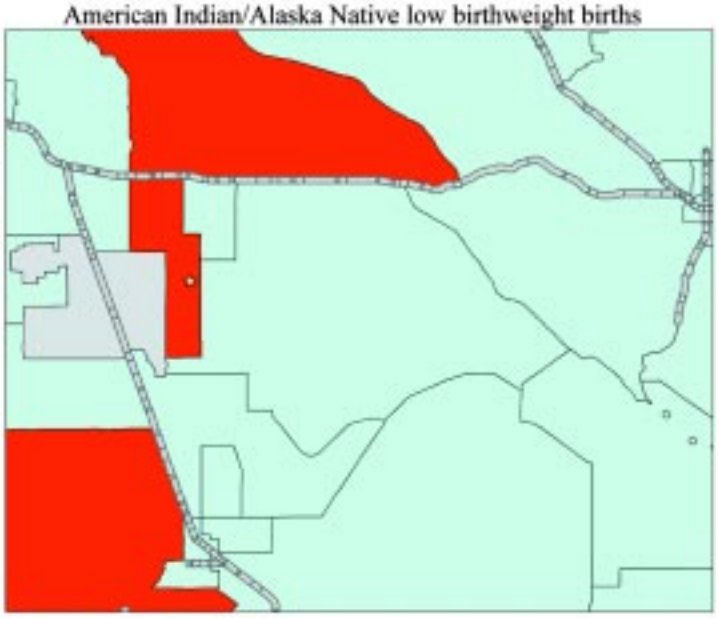
Asian/Pacific Islander low birthweight births



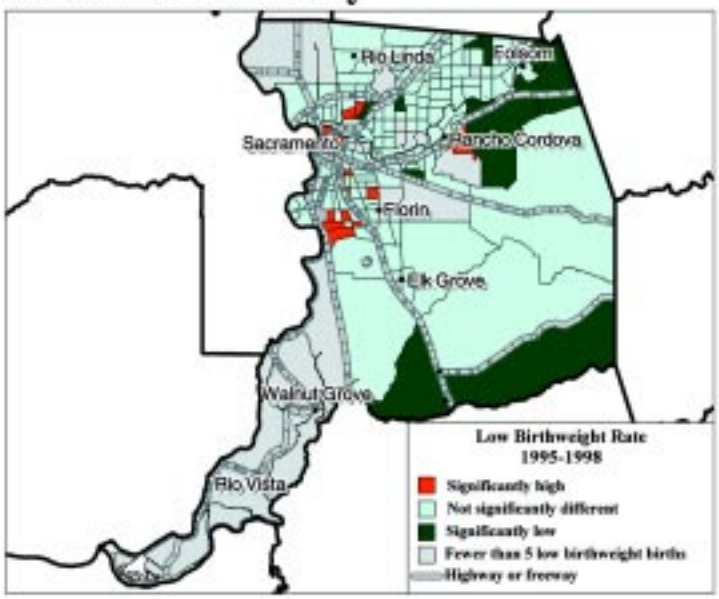
African American low birthweight births



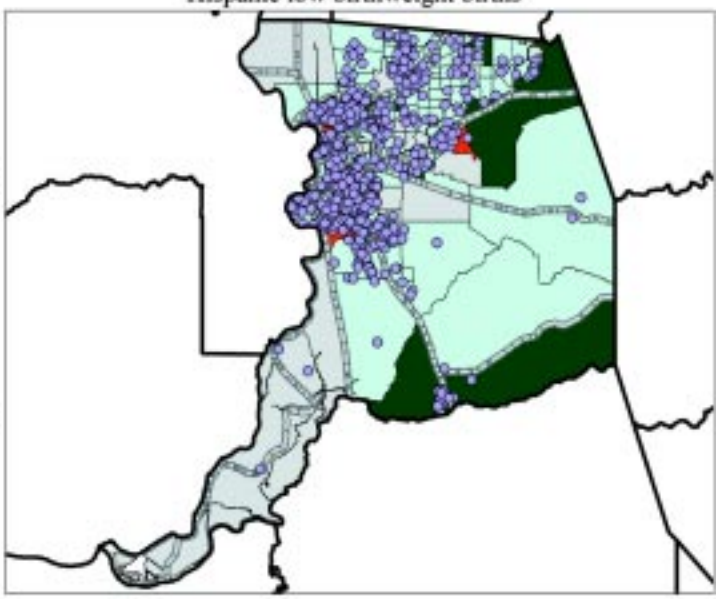
American Indian/Alaska Native low birthweight births



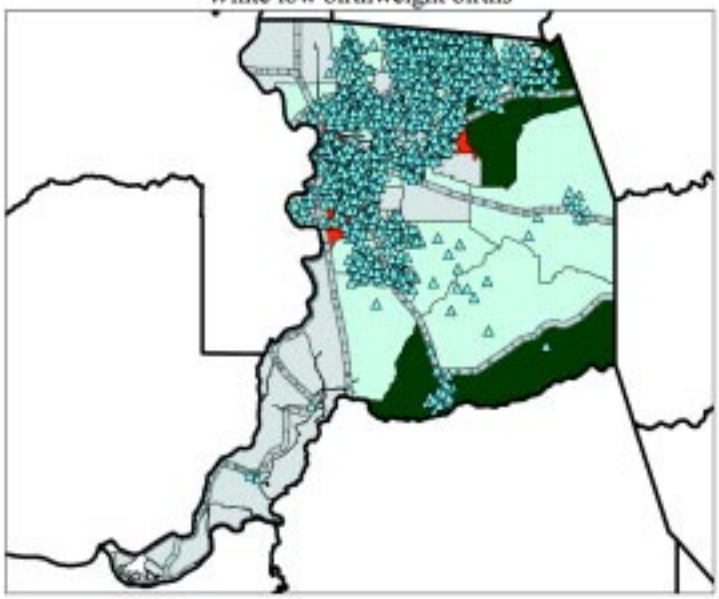
Sacramento County



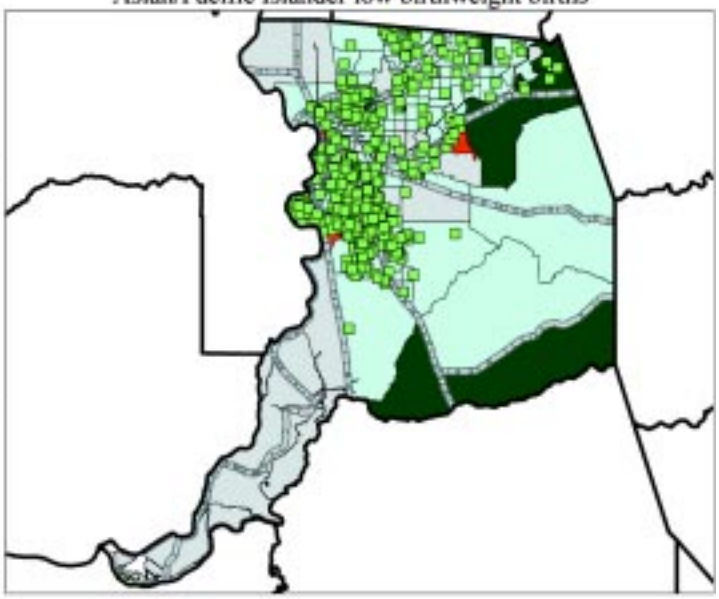
Hispanic low birthweight births



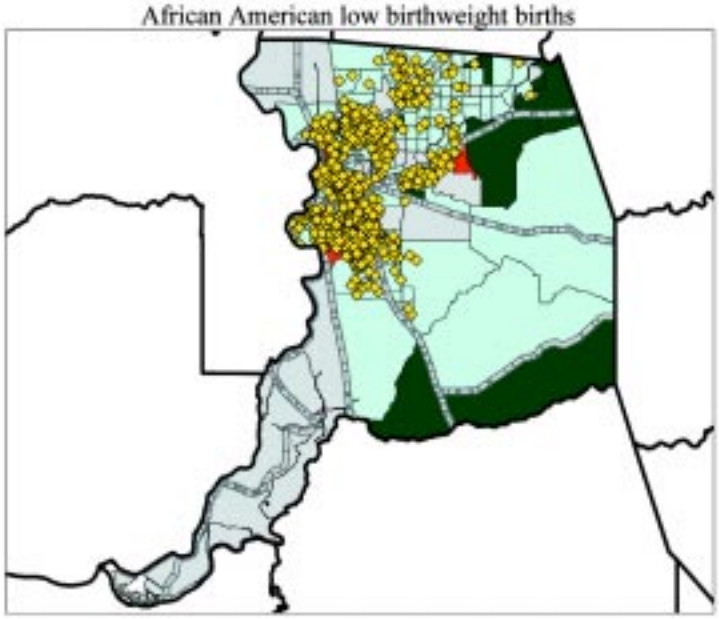
White low birthweight births



Asian/Pacific Islander low birthweight births

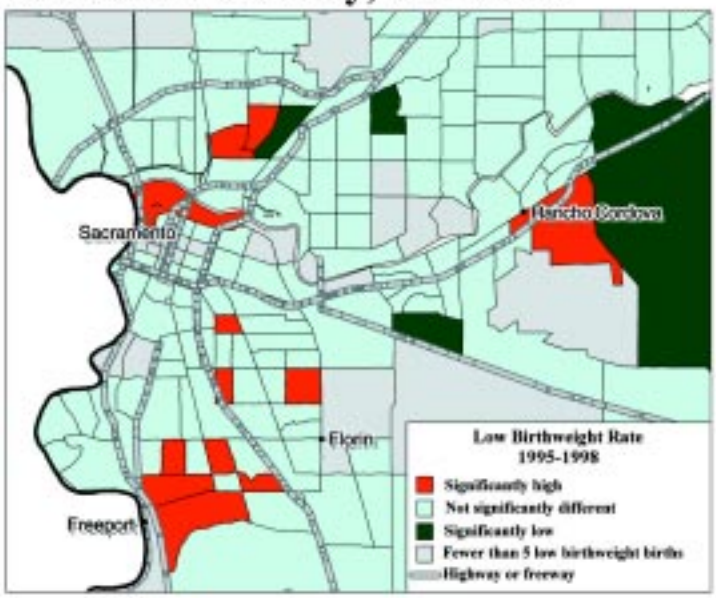


African American low birthweight births

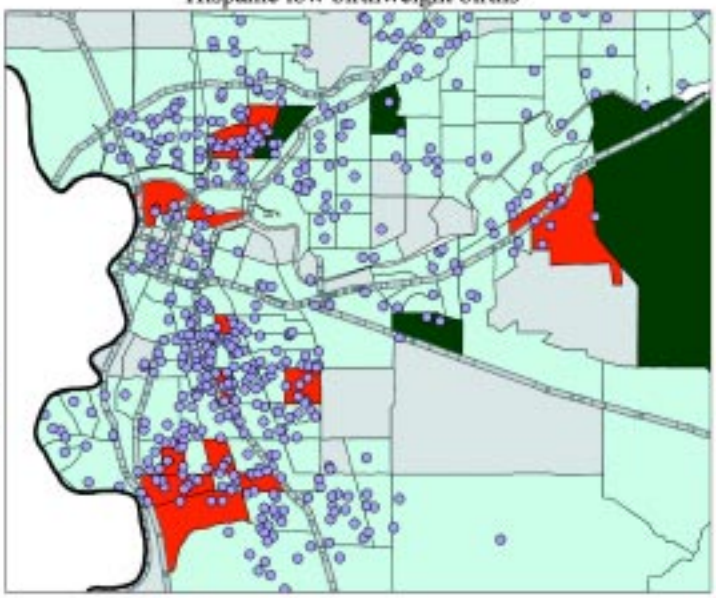


American Indian/Alaska Native low birthweight births

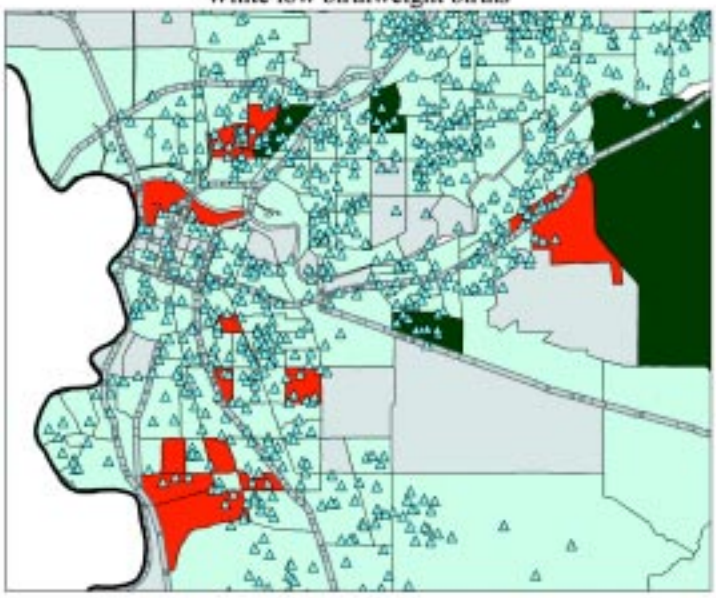
Sacramento County, continued



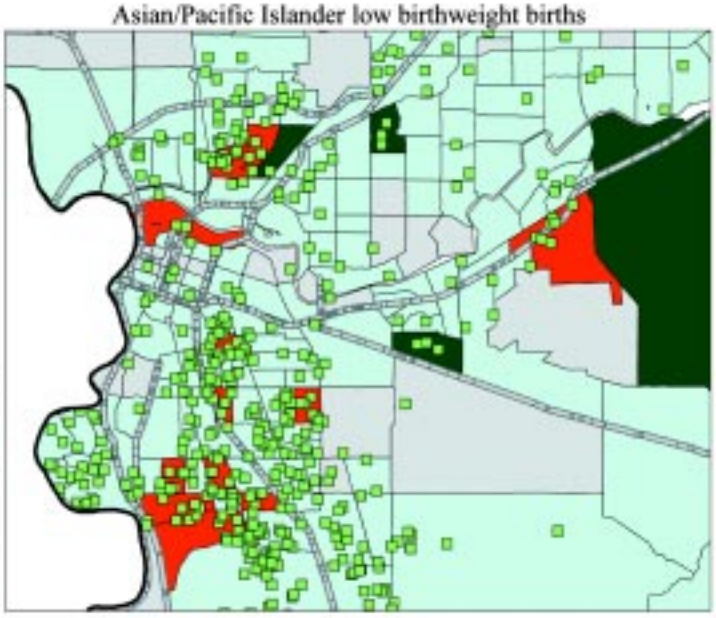
Hispanic low birthweight births



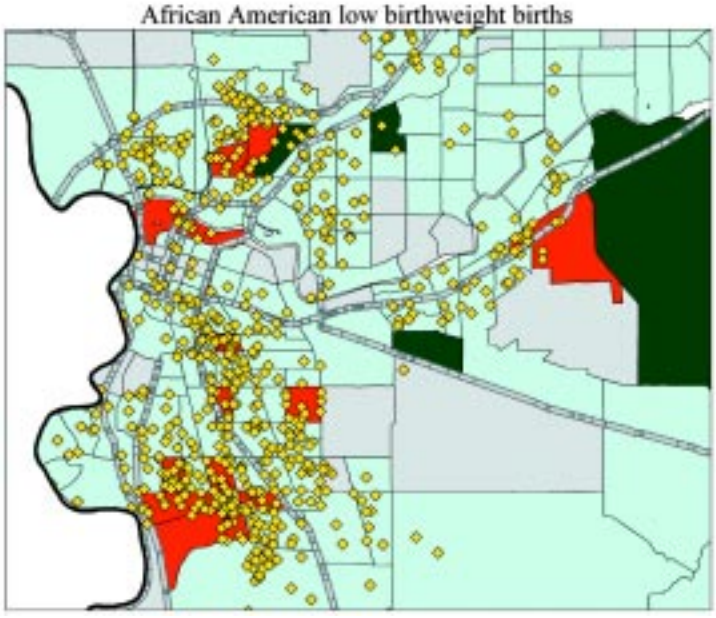
White low birthweight births



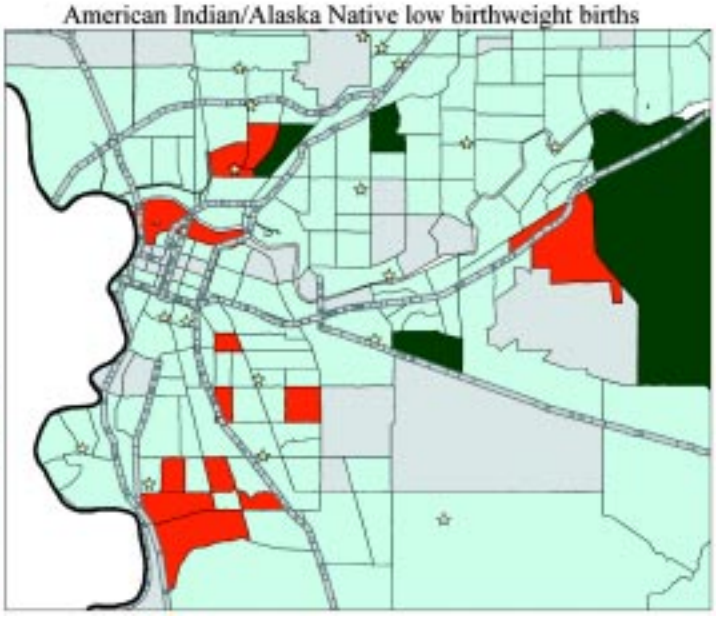
Asian/Pacific Islander low birthweight births



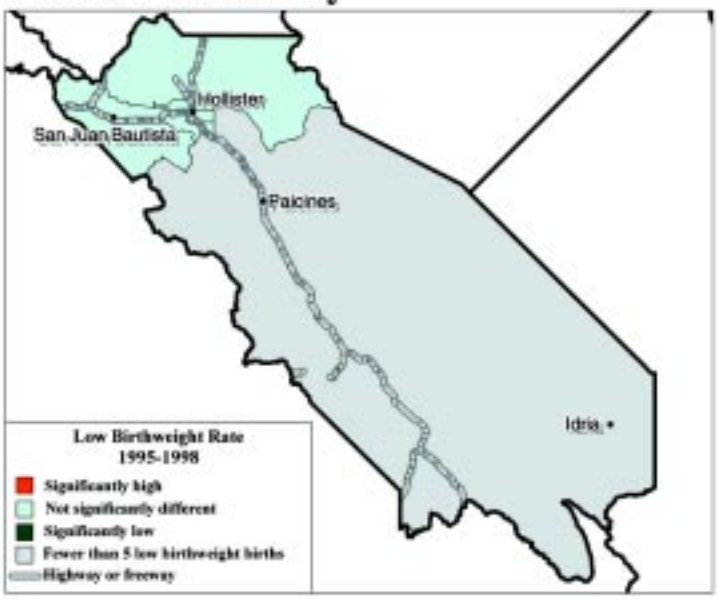
African American low birthweight births



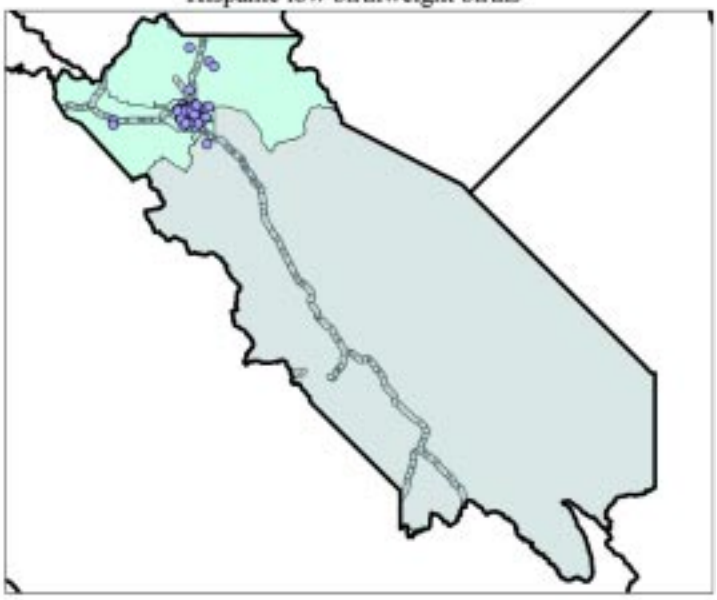
American Indian/Alaska Native low birthweight births



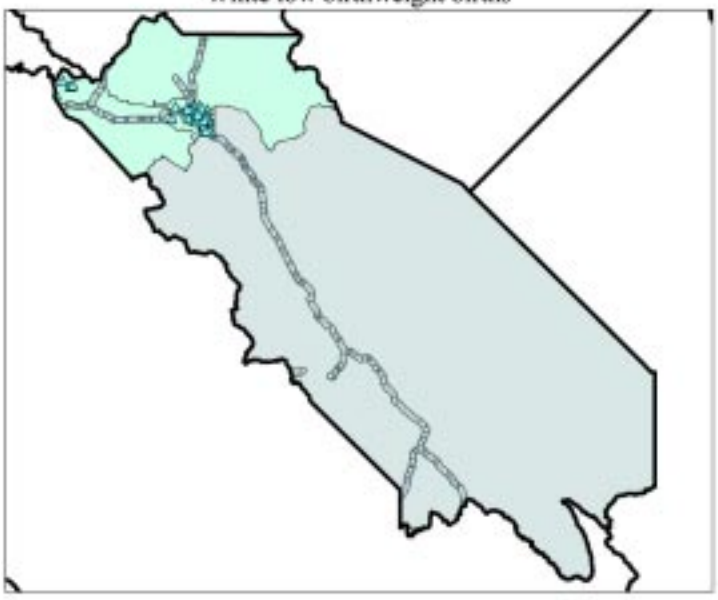
San Benito County



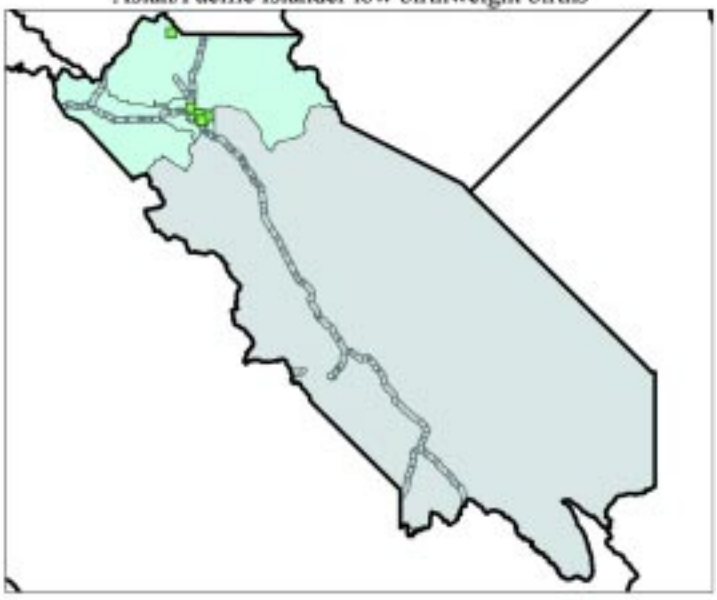
Hispanic low birthweight births



White low birthweight births



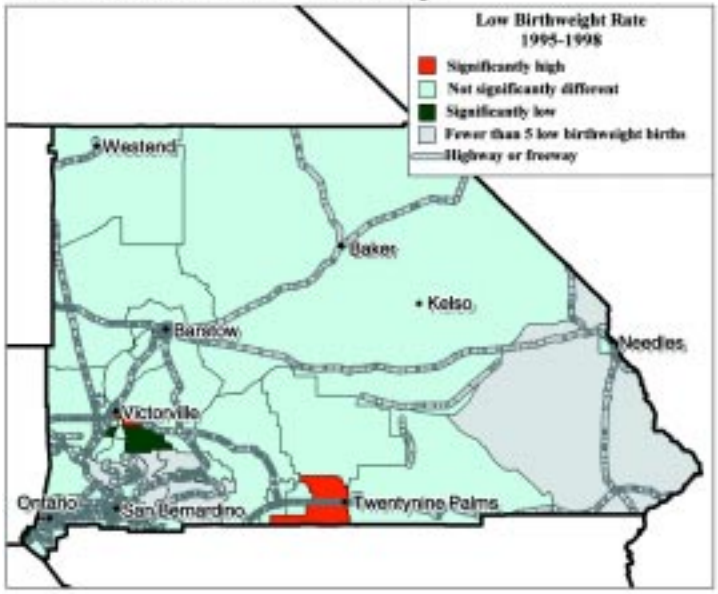
Asian/Pacific Islander low birthweight births



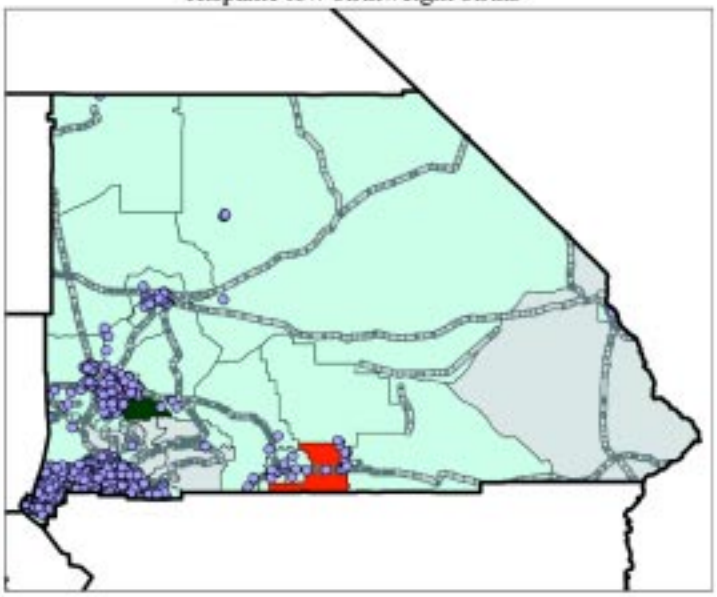
African American low birthweight births

American Indian/Alaska Native low birthweight births

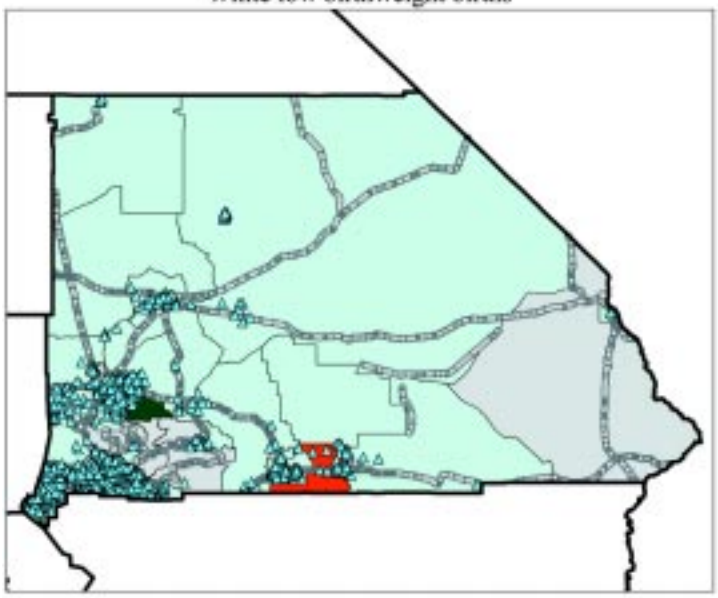
San Bernardino County



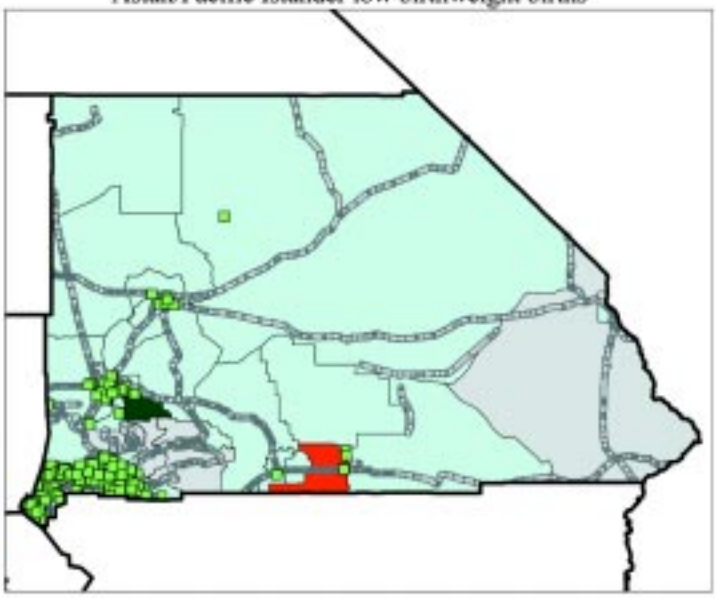
Hispanic low birthweight births



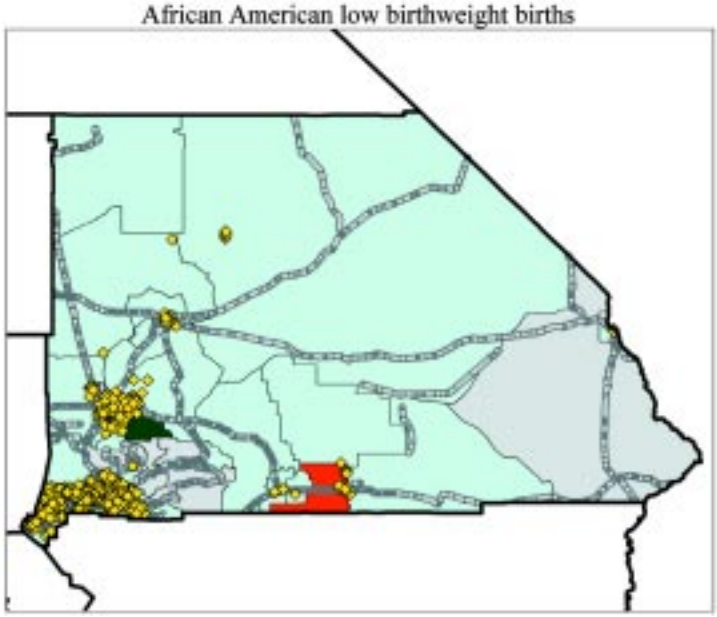
White low birthweight births



Asian/Pacific Islander low birthweight births

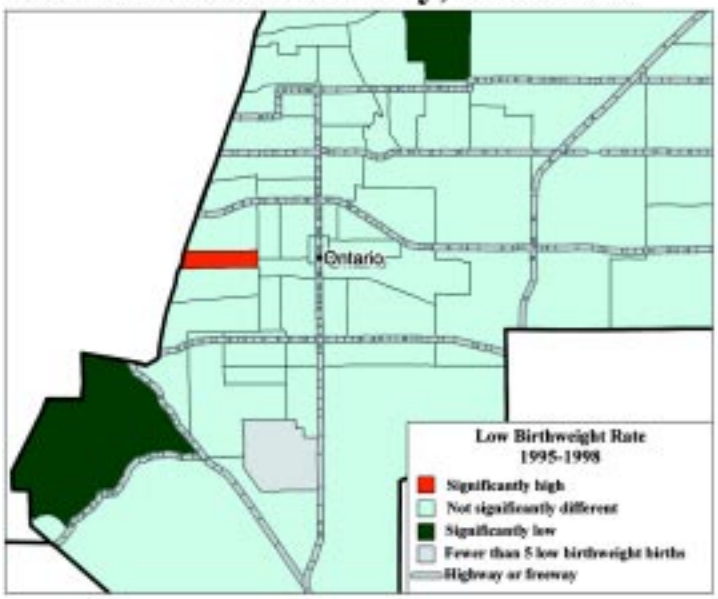


African American low birthweight births

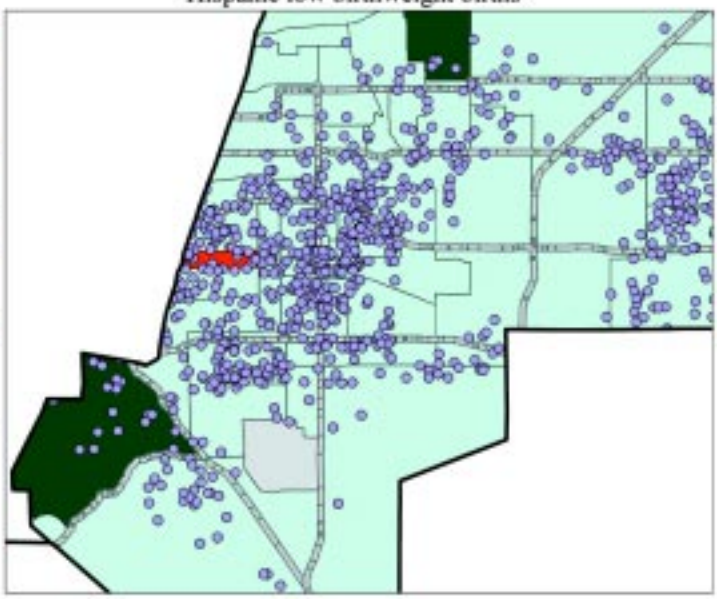


American Indian/Alaska Native low birthweight births

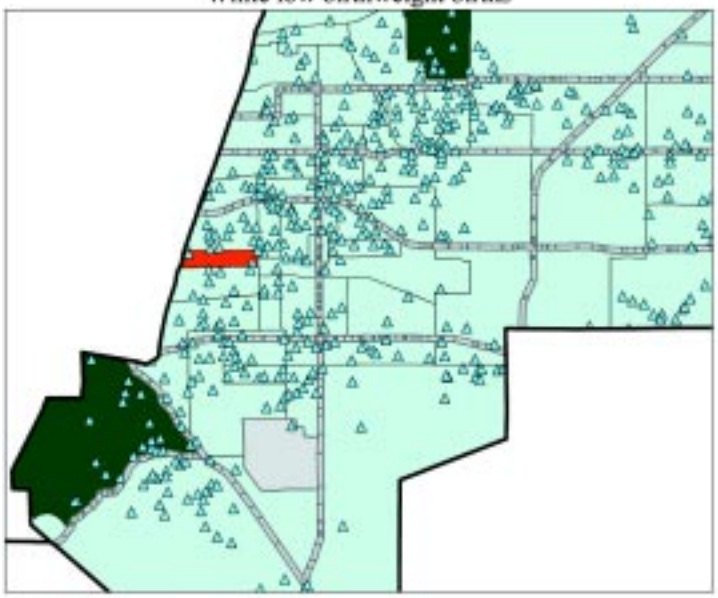
San Bernardino County, continued



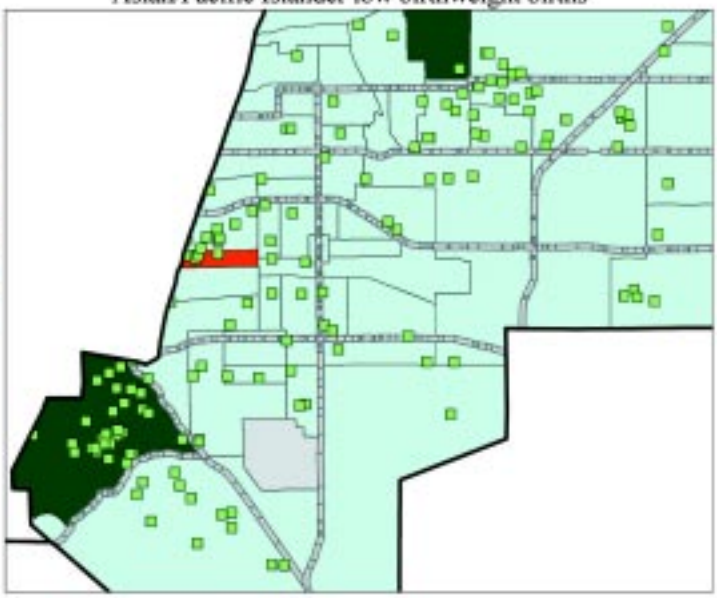
Hispanic low birthweight births



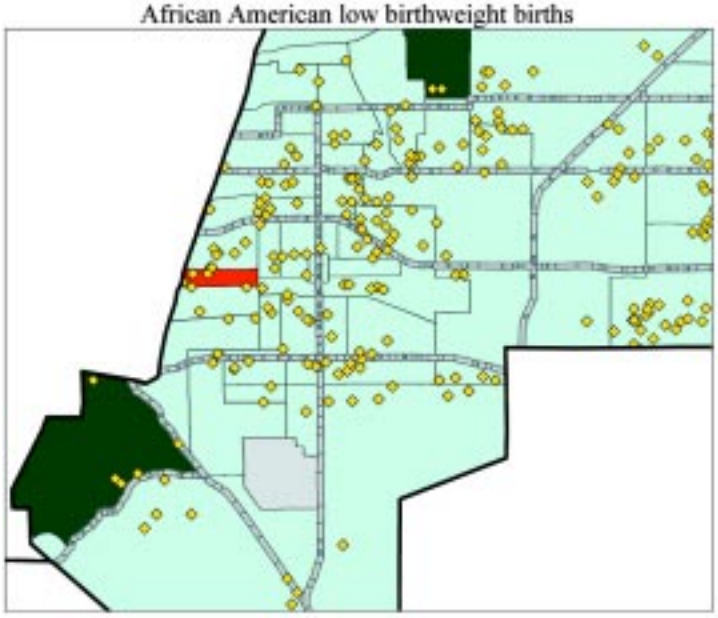
White low birthweight births



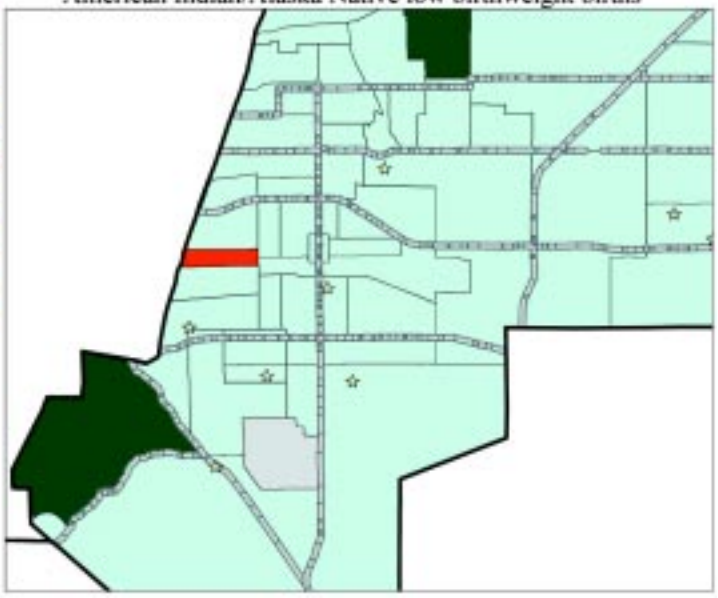
Asian/Pacific Islander low birthweight births



African American low birthweight births

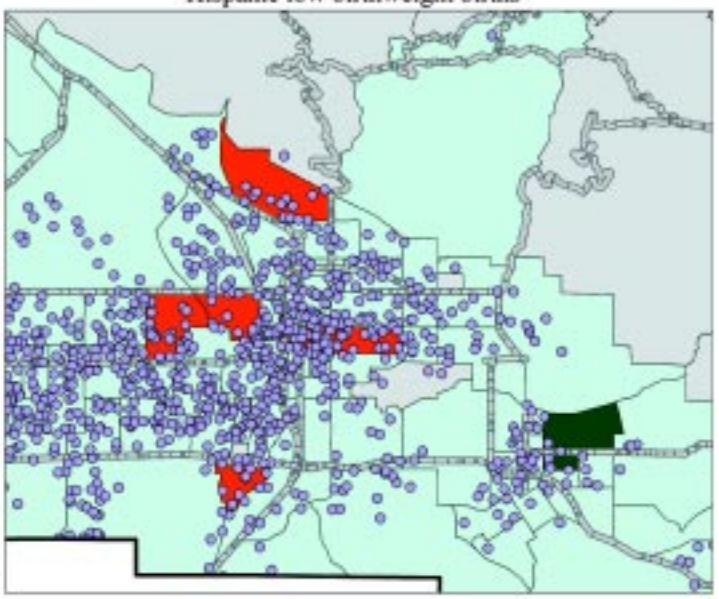


American Indian/Alaska Native low birthweight births

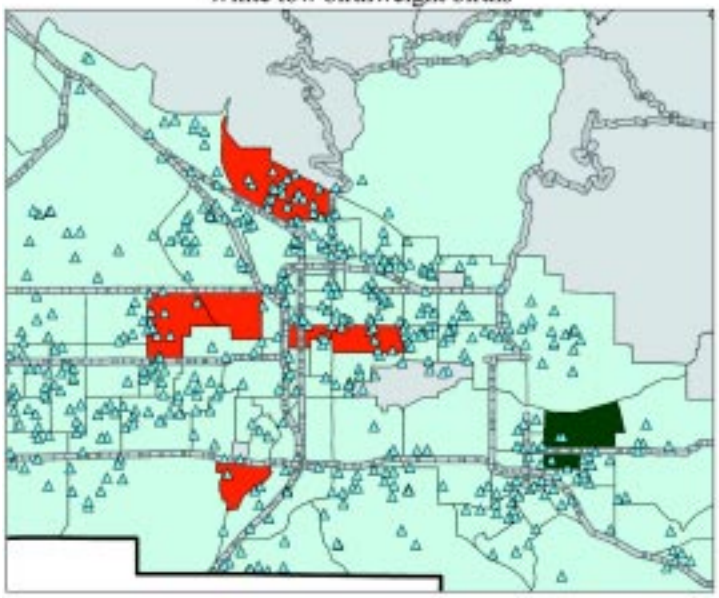


San Bernardino County, continued

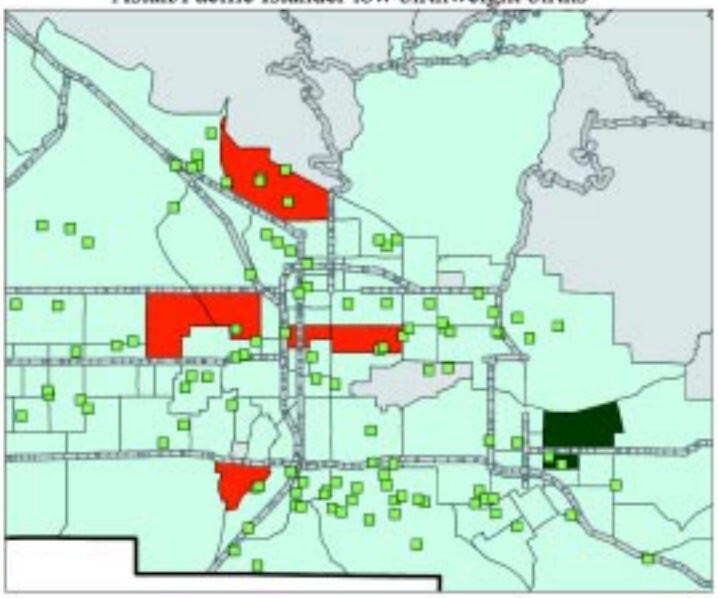
Hispanic low birthweight births



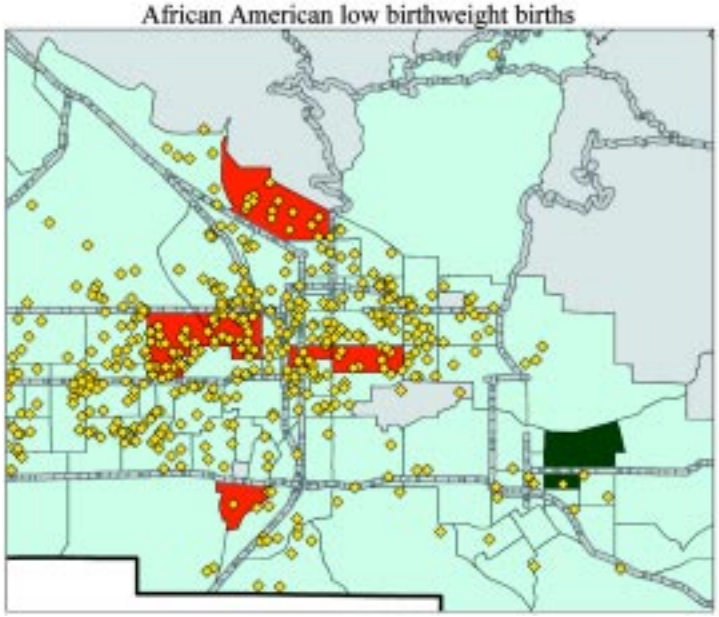
White low birthweight births



Asian/Pacific Islander low birthweight births



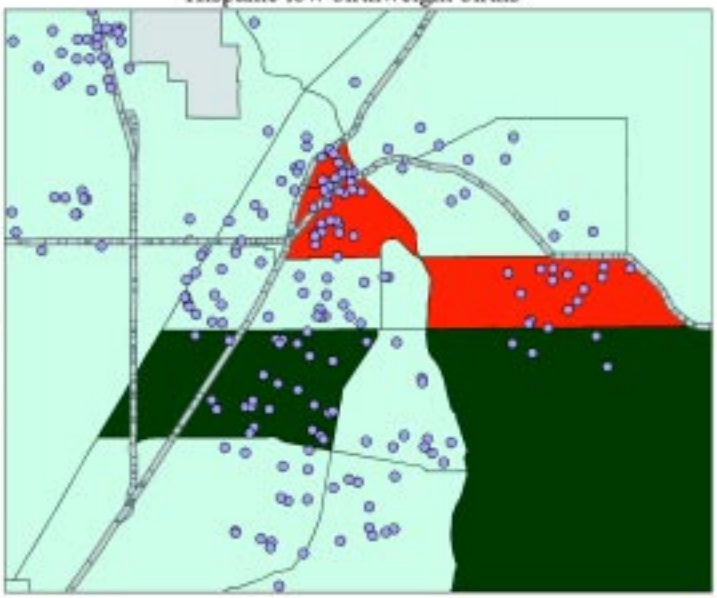
African American low birthweight births



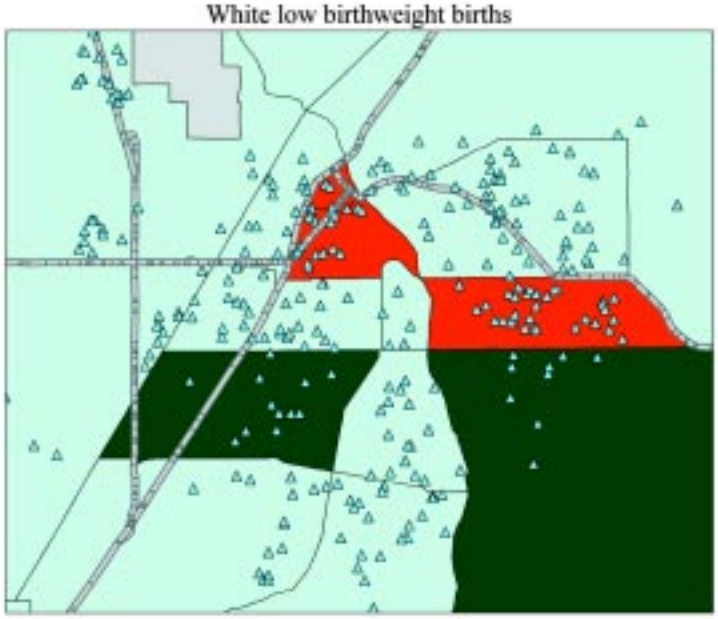
American Indian/Alaska Native low birthweight births

San Bernardino County, continued

Hispanic low birthweight births

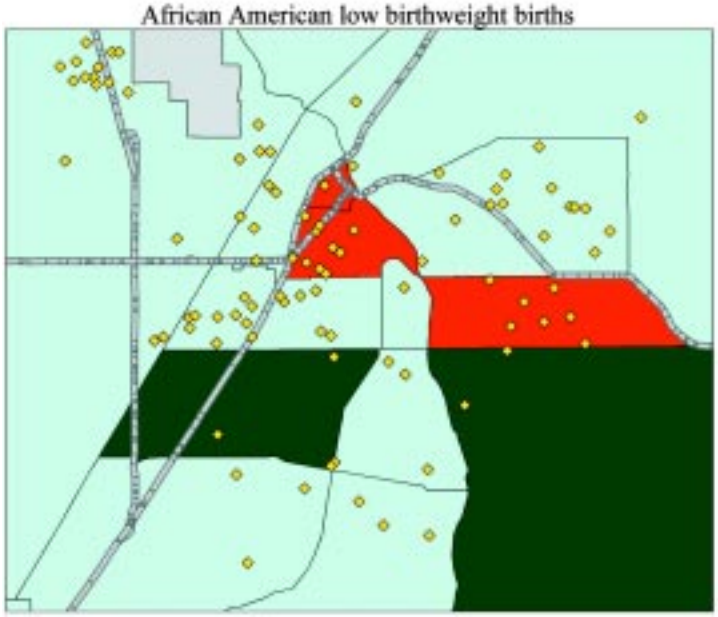


White low birthweight births



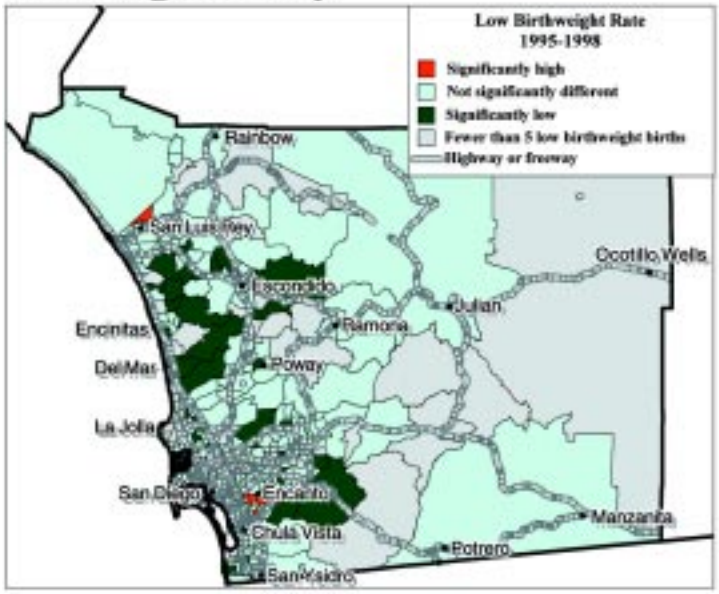
Asian/Pacific Islander low birthweight births

African American low birthweight births

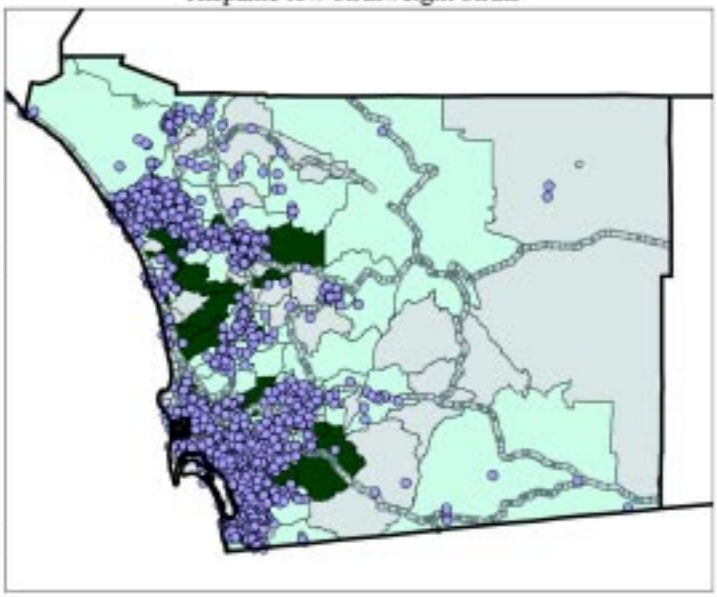


American Indian/Alaska Native low birthweight births

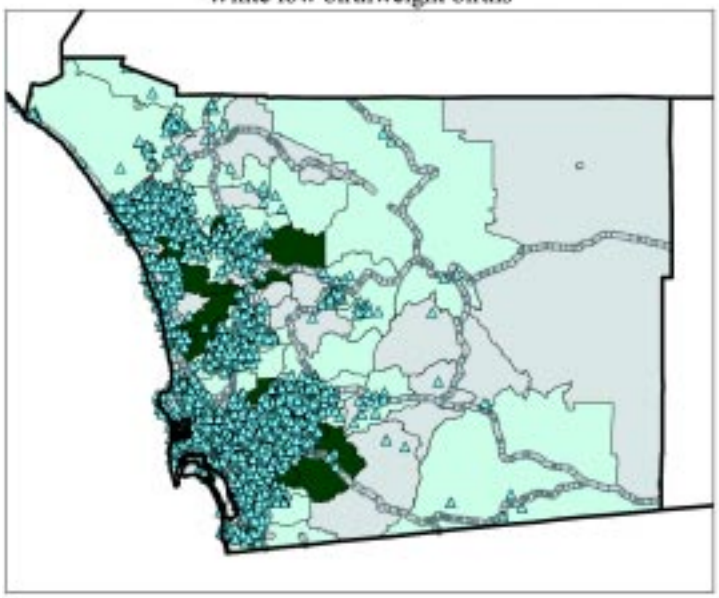
San Diego County



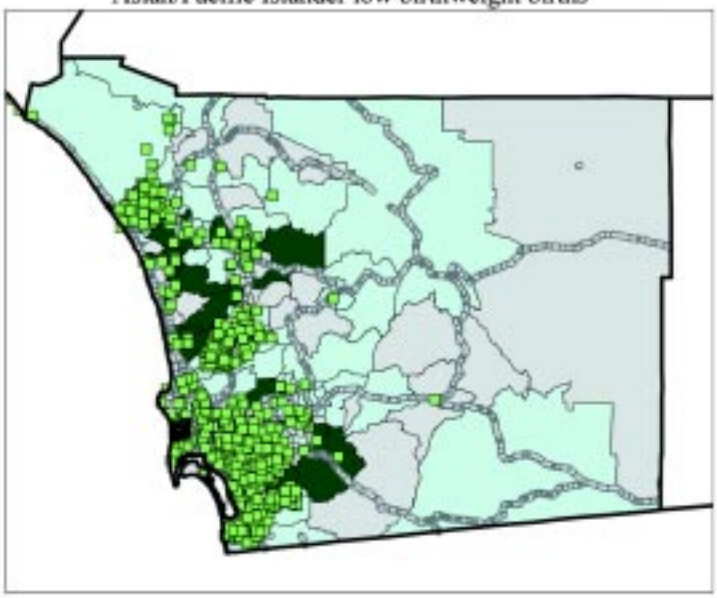
Hispanic low birthweight births



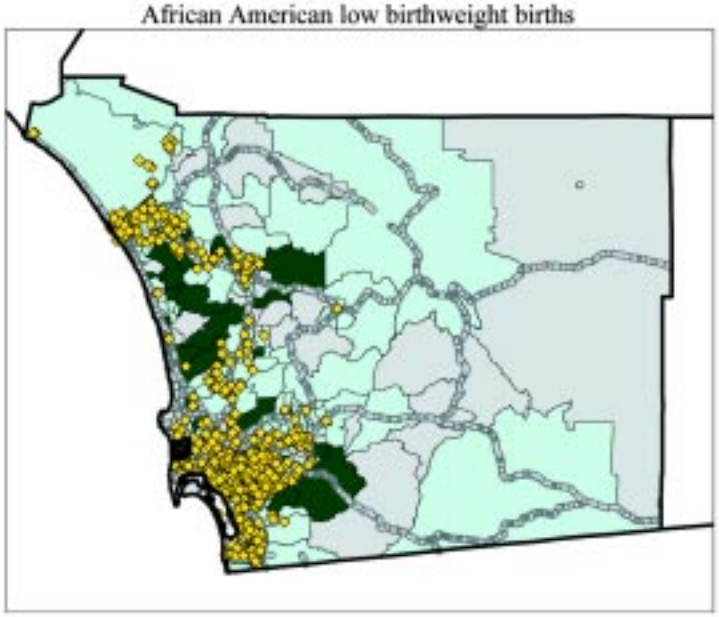
White low birthweight births



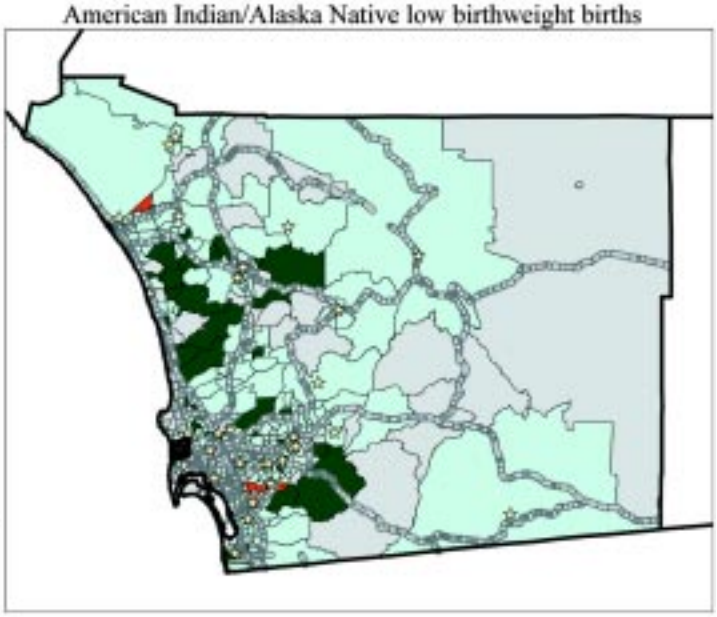
Asian/Pacific Islander low birthweight births



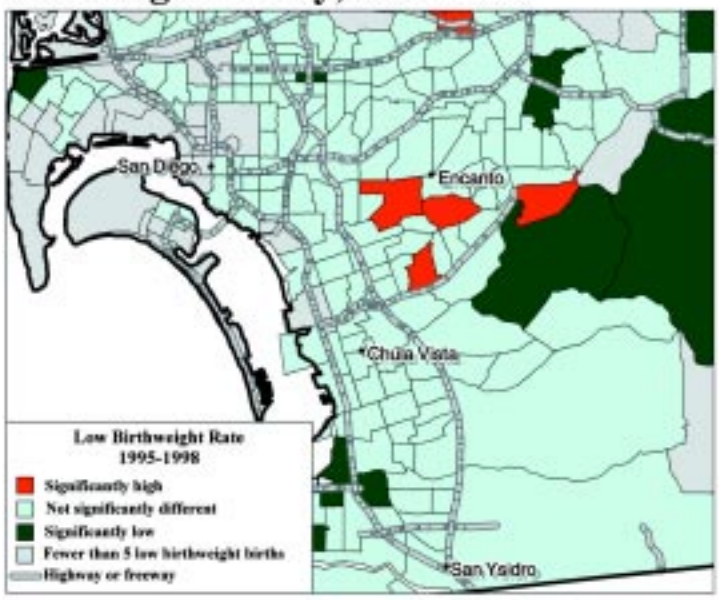
African American low birthweight births



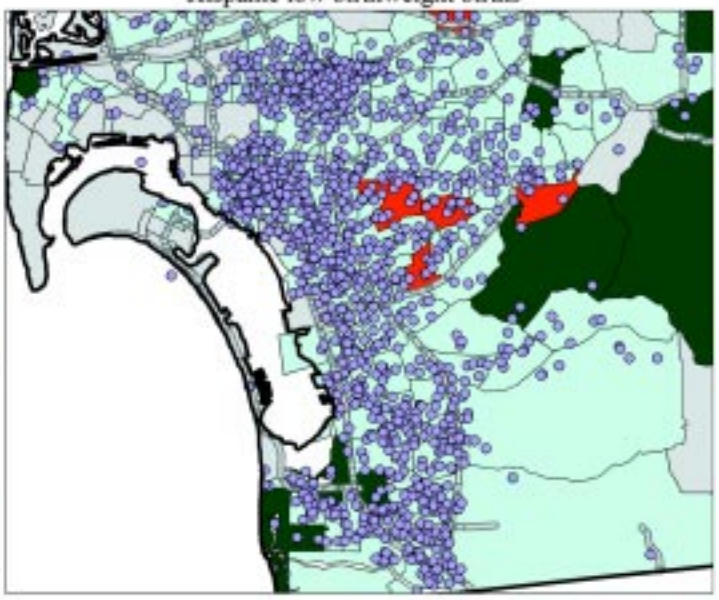
American Indian/Alaska Native low birthweight births



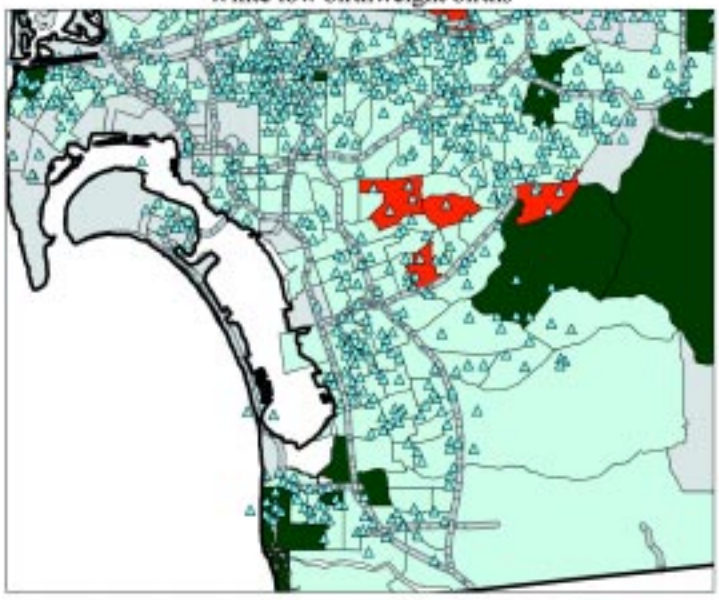
San Diego County, continued



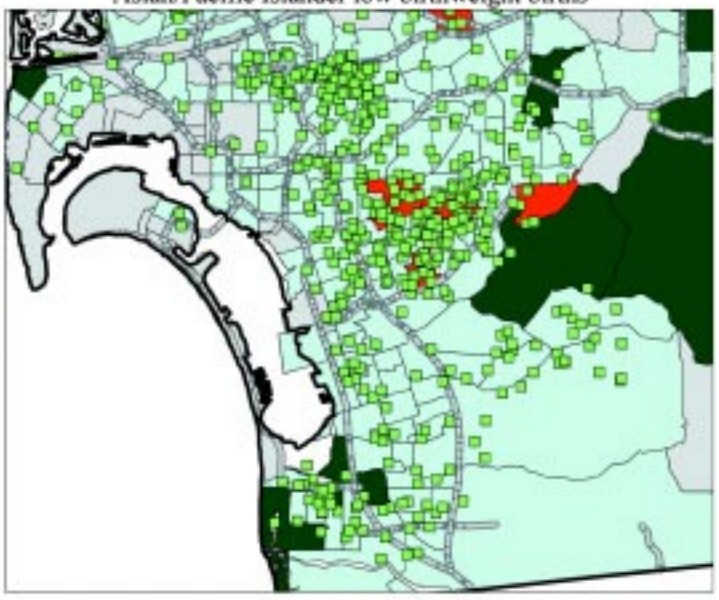
Hispanic low birthweight births



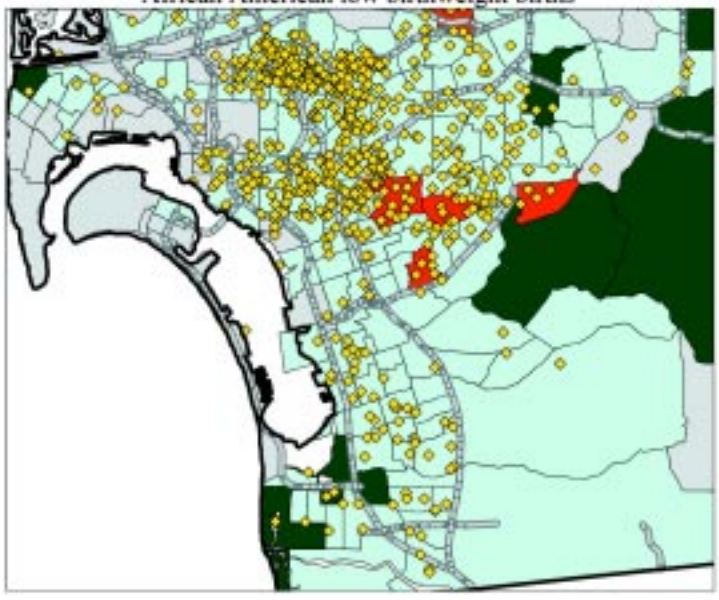
White low birthweight births



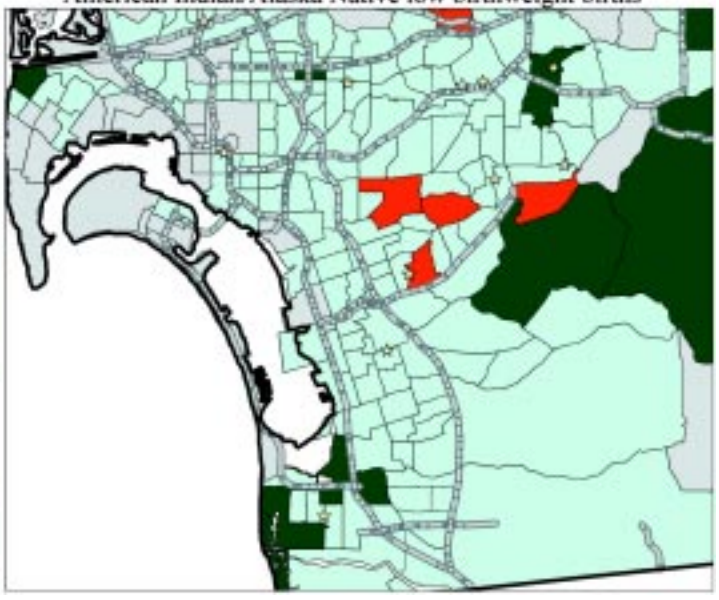
Asian/Pacific Islander low birthweight births



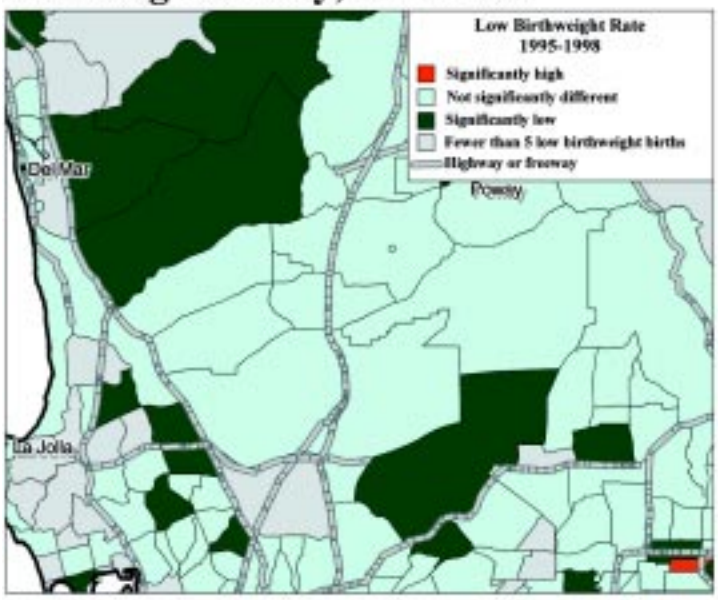
African American low birthweight births



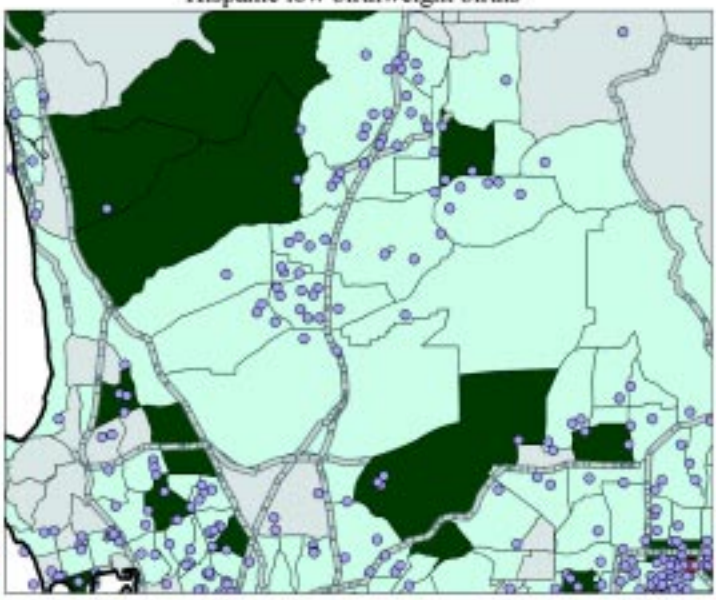
American Indian/Alaska Native low birthweight births



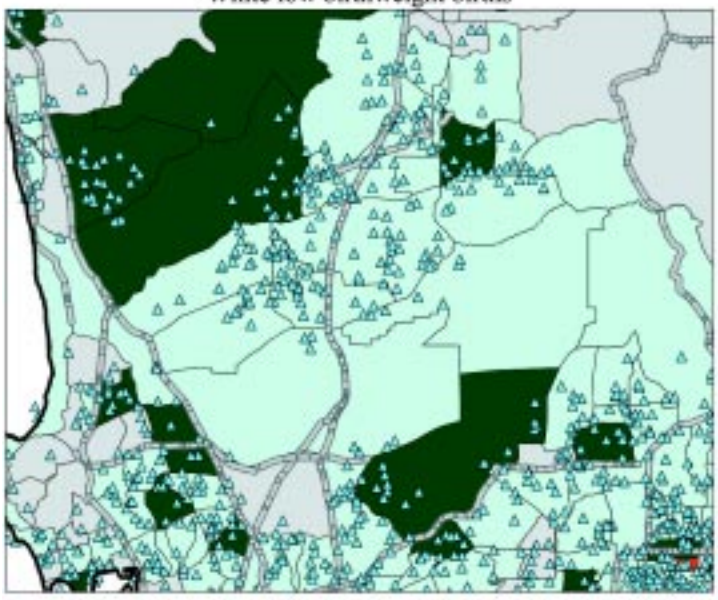
San Diego County, continued



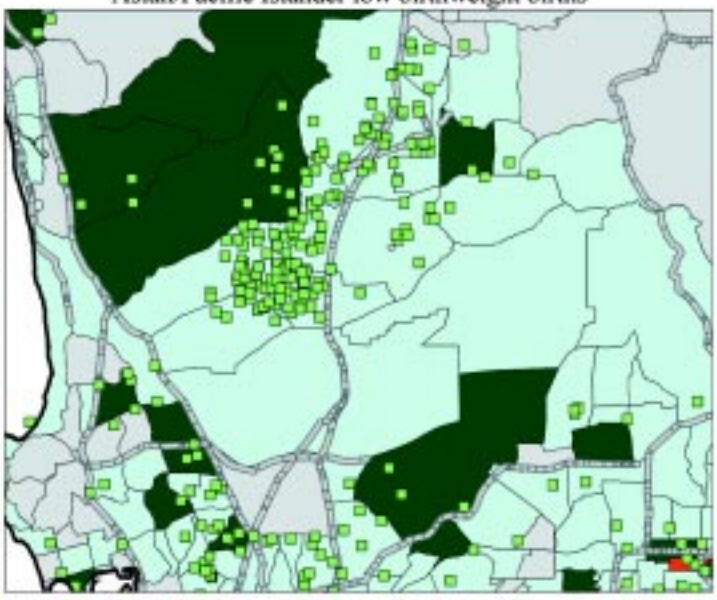
Hispanic low birthweight births



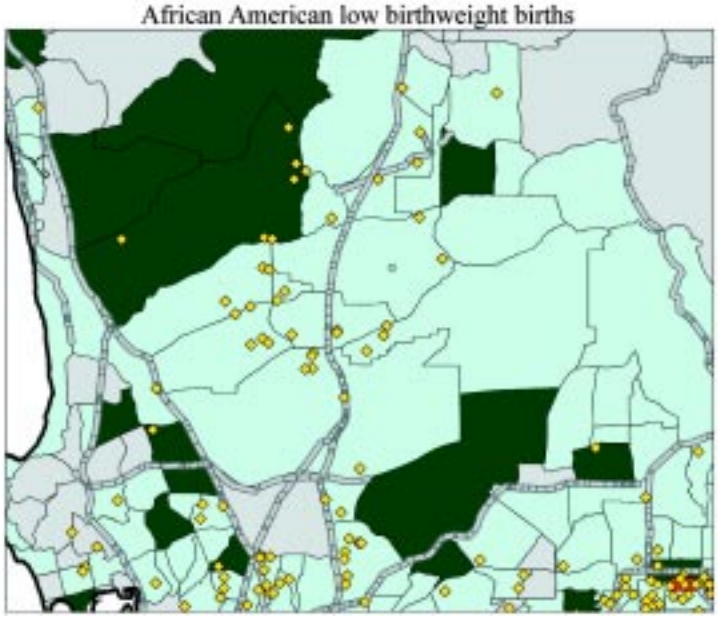
White low birthweight births



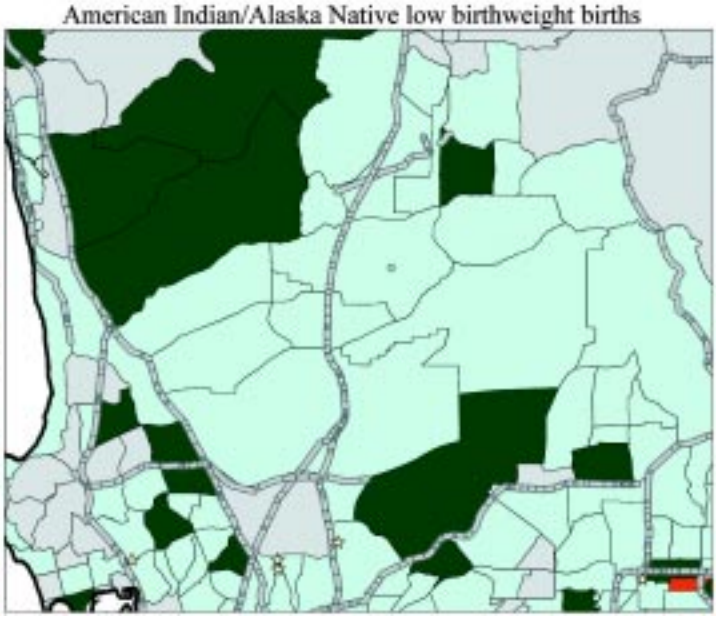
Asian/Pacific Islander low birthweight births



African American low birthweight births

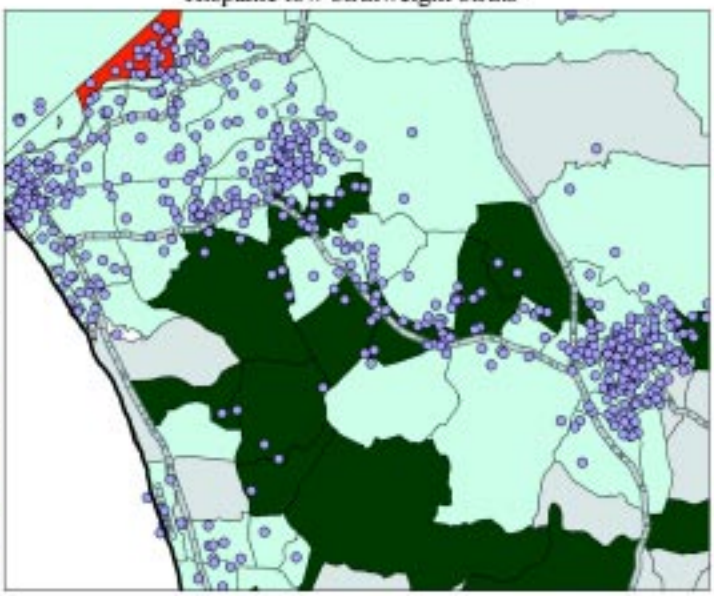


American Indian/Alaska Native low birthweight births

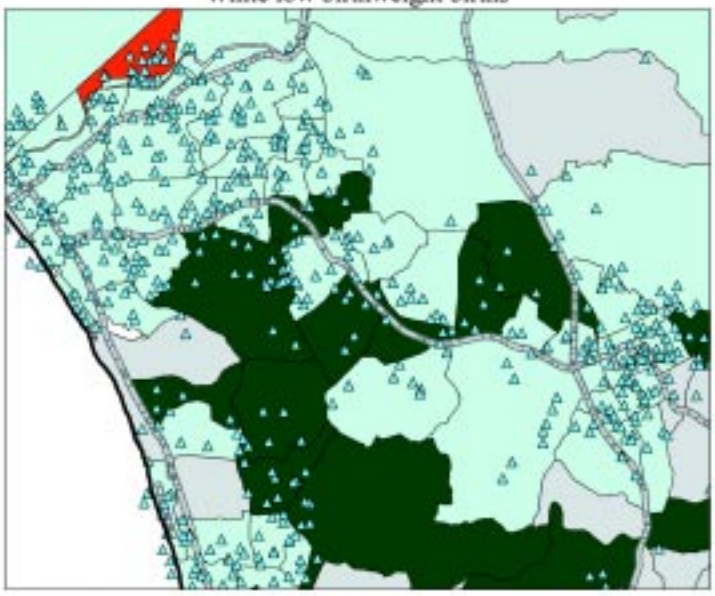


San Diego County, continued

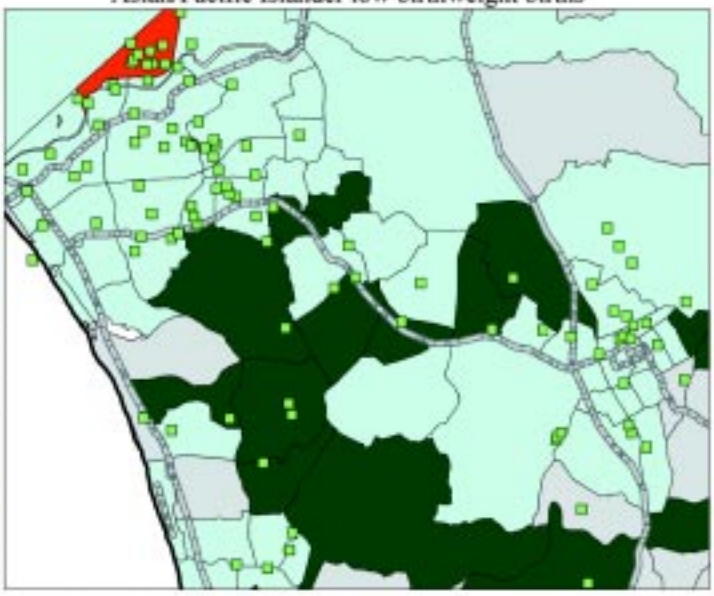
Hispanic low birthweight births



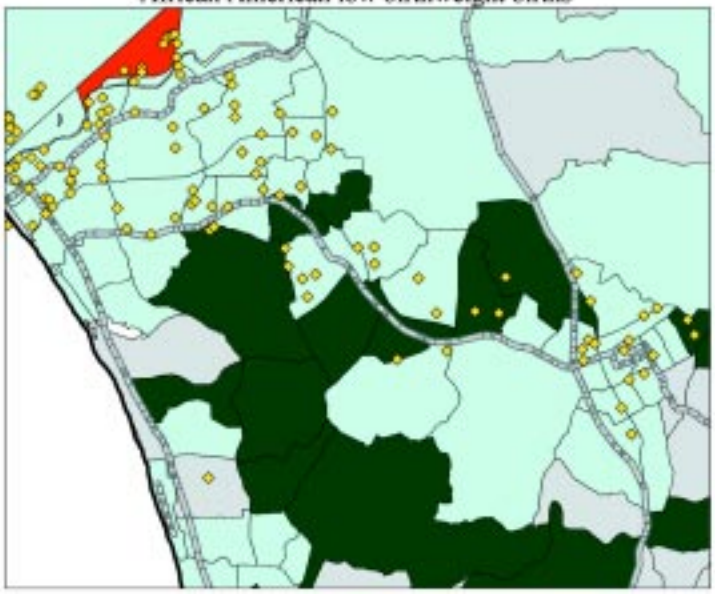
White low birthweight births



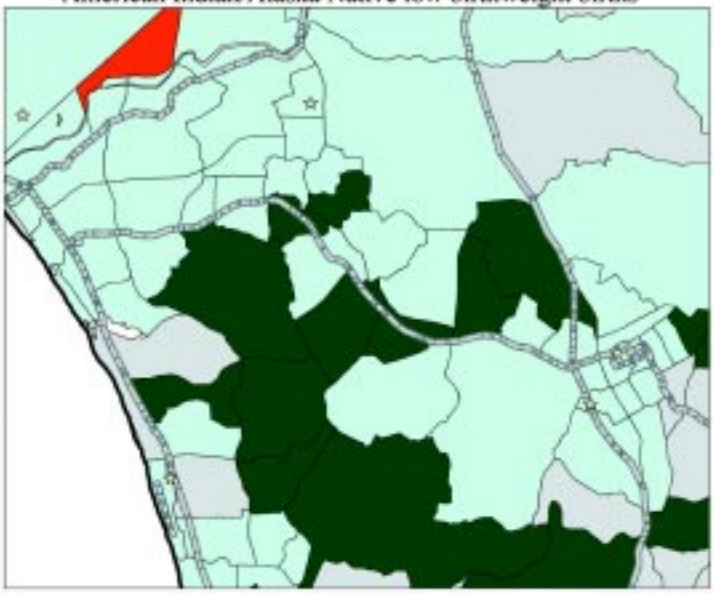
Asian/Pacific Islander low birthweight births



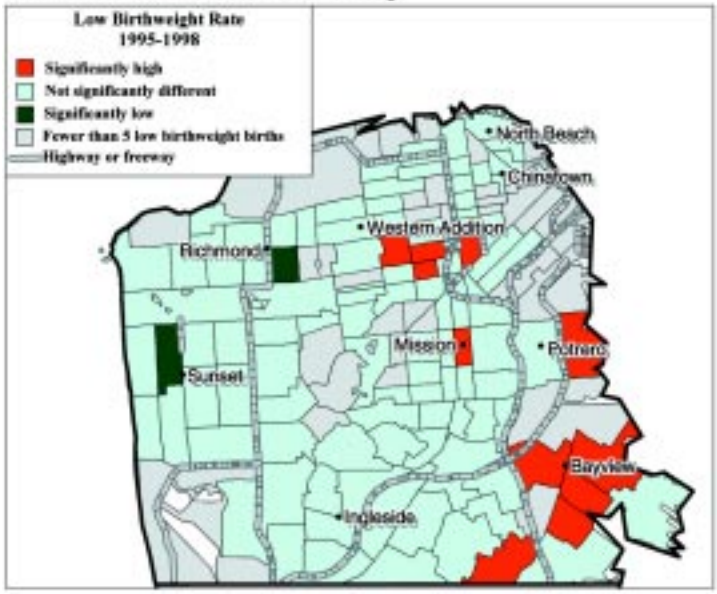
African American low birthweight births



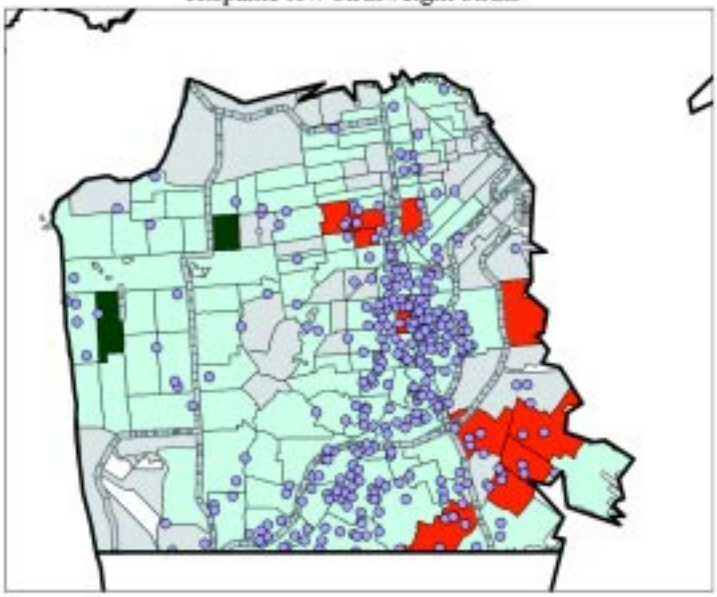
American Indian/Alaska Native low birthweight births



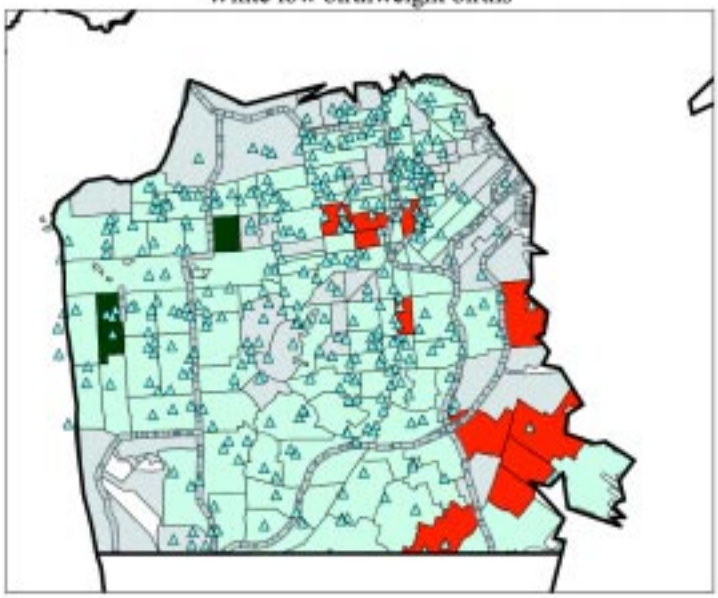
San Francisco County



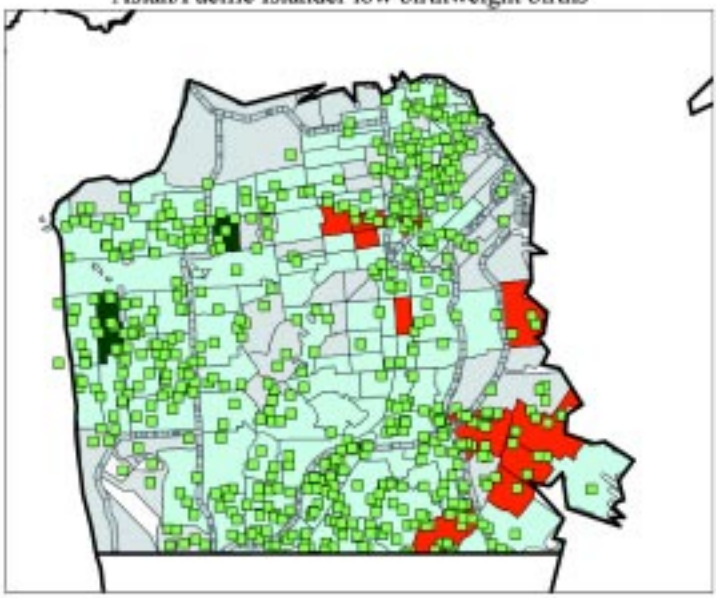
Hispanic low birthweight births



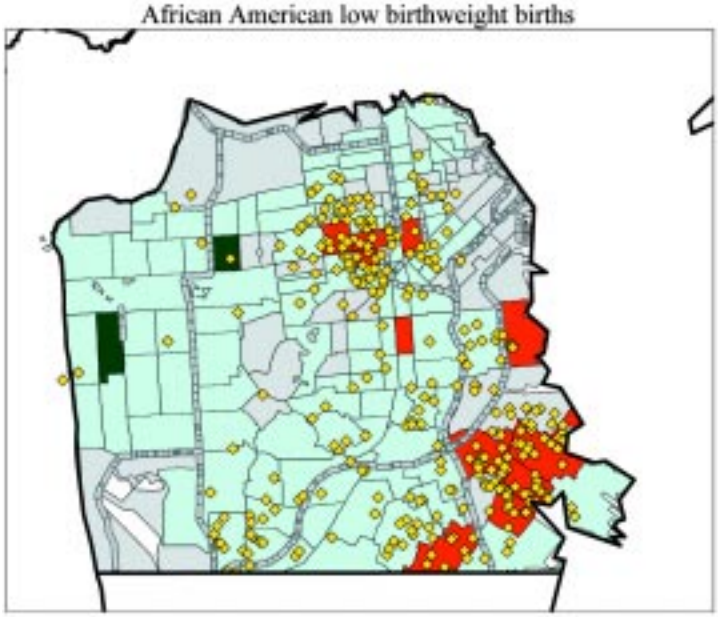
White low birthweight births



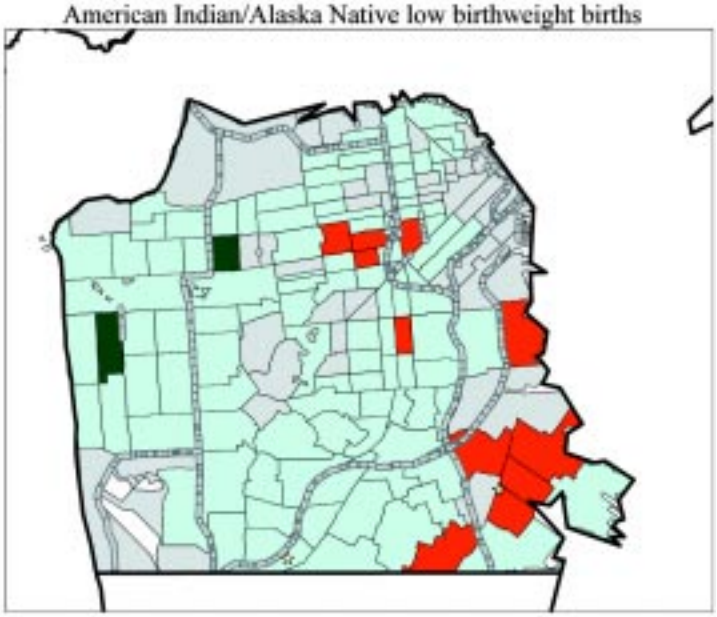
Asian/Pacific Islander low birthweight births



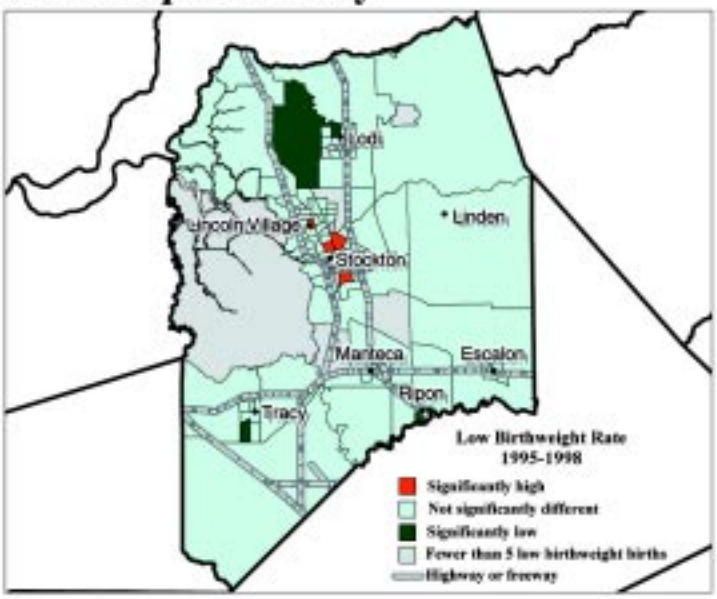
African American low birthweight births



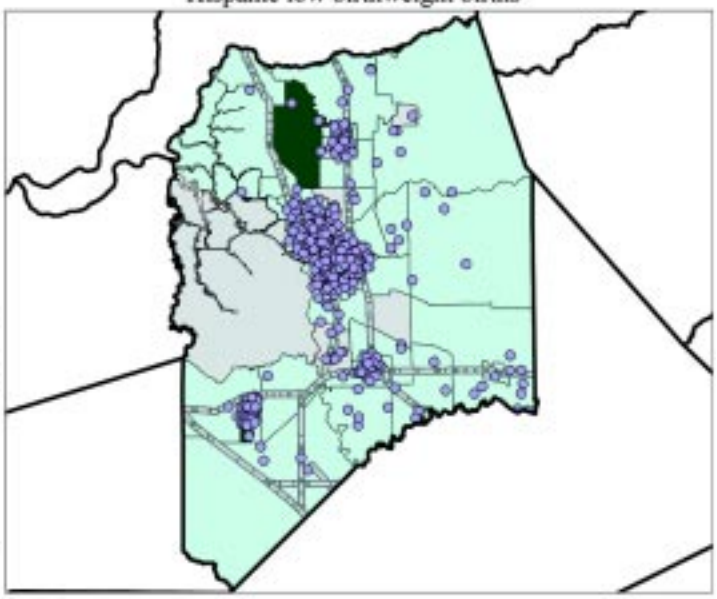
American Indian/Alaska Native low birthweight births



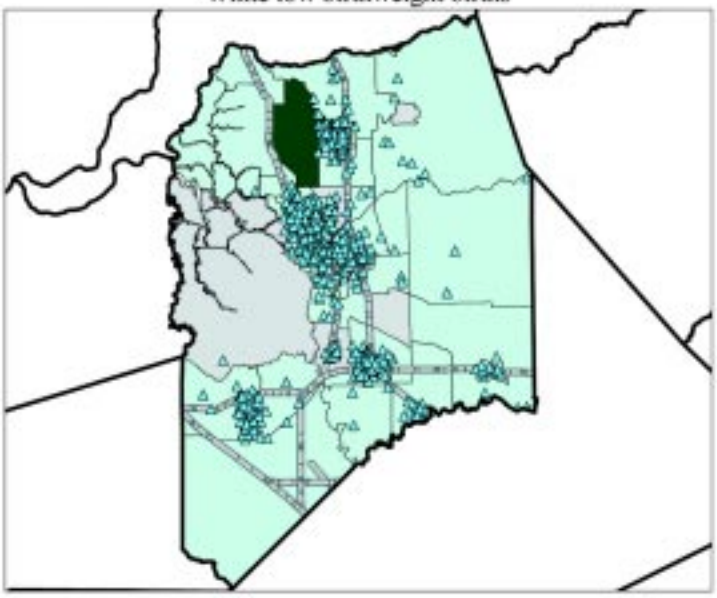
San Joaquin County



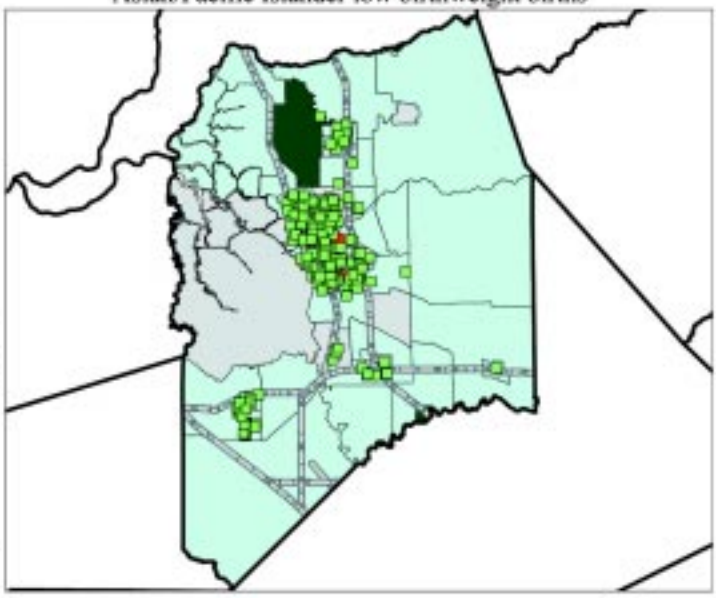
Hispanic low birthweight births



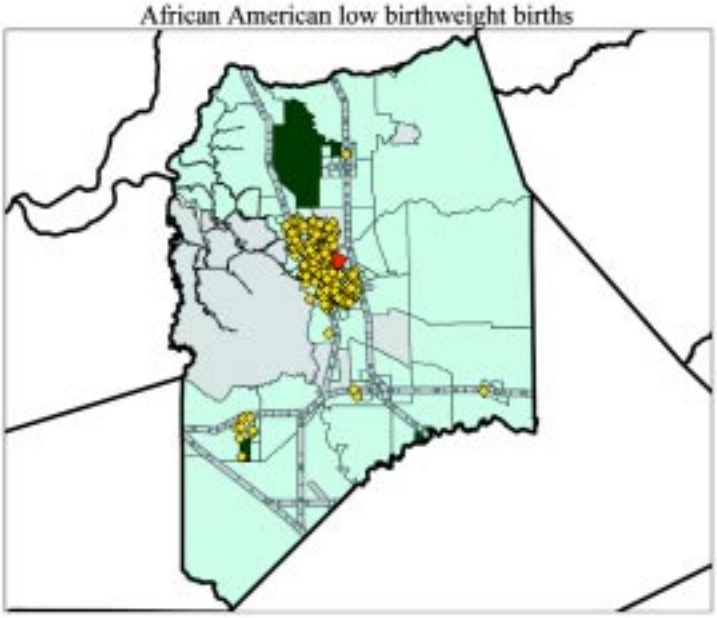
White low birthweight births



Asian/Pacific Islander low birthweight births

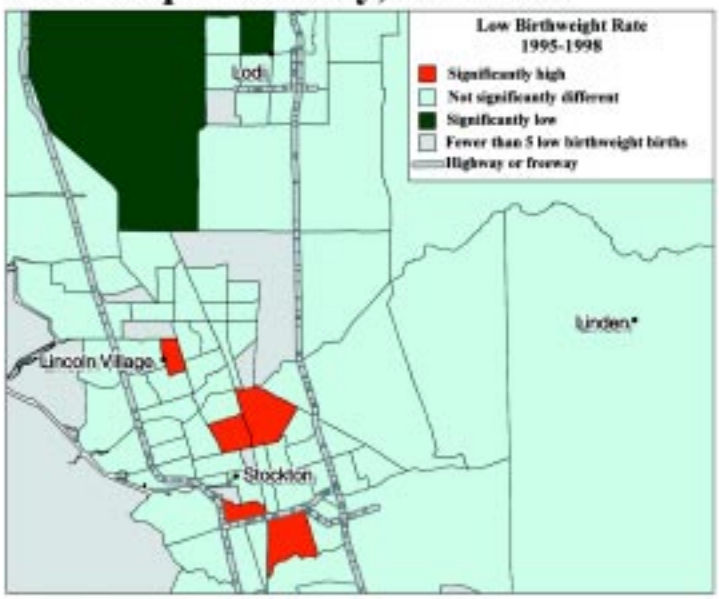


African American low birthweight births

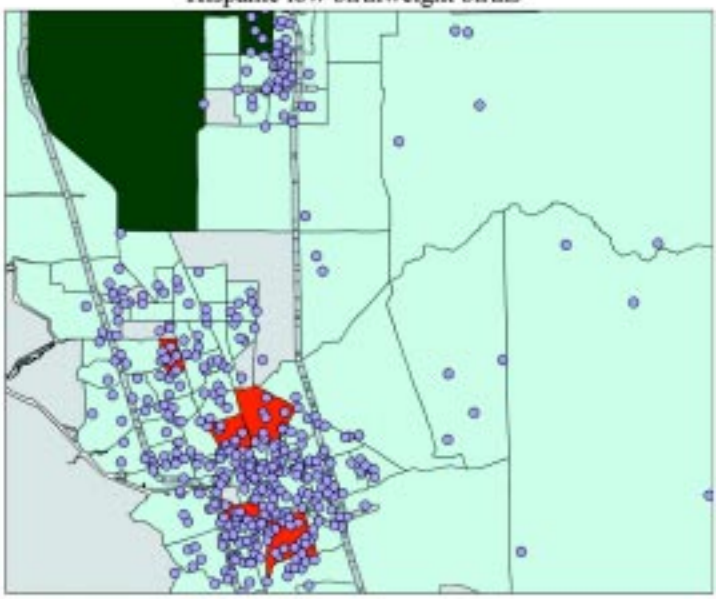


American Indian/Alaska Native low birthweight births

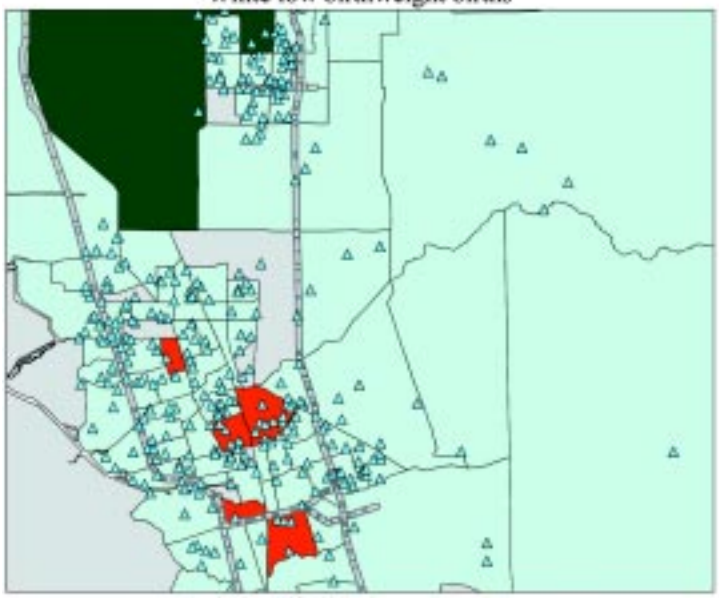
San Joaquin County, continued



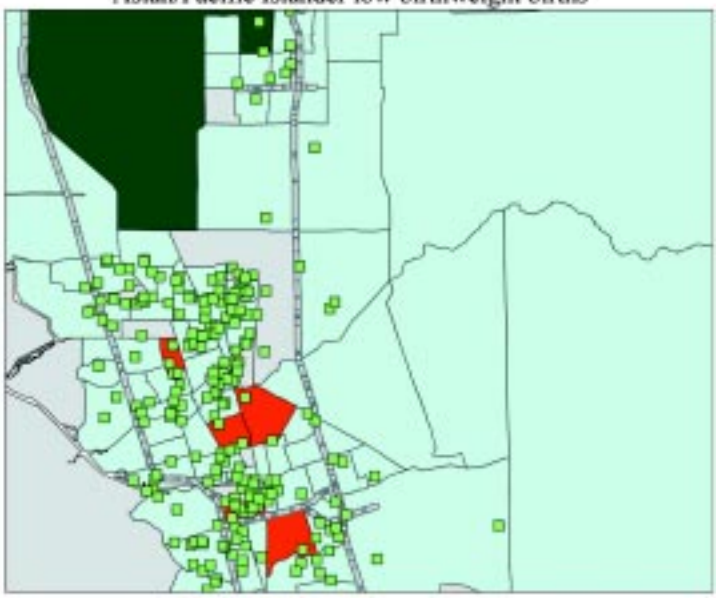
Hispanic low birthweight births



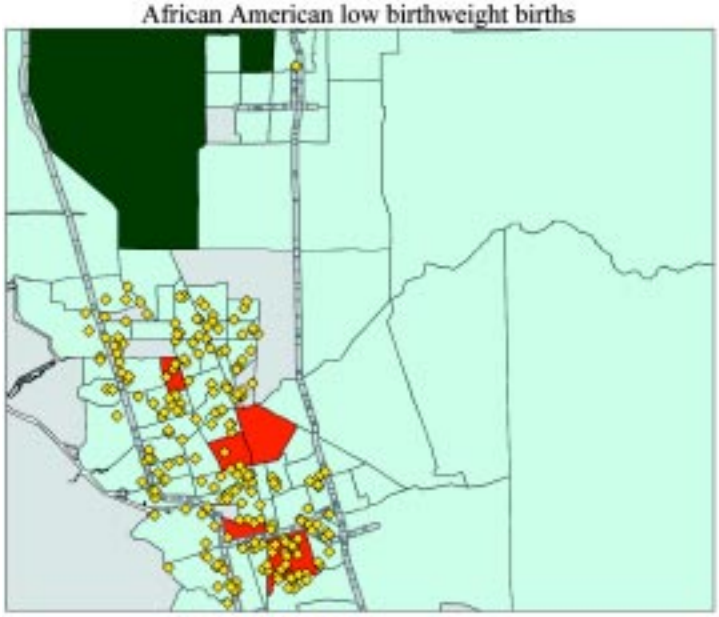
White low birthweight births



Asian/Pacific Islander low birthweight births

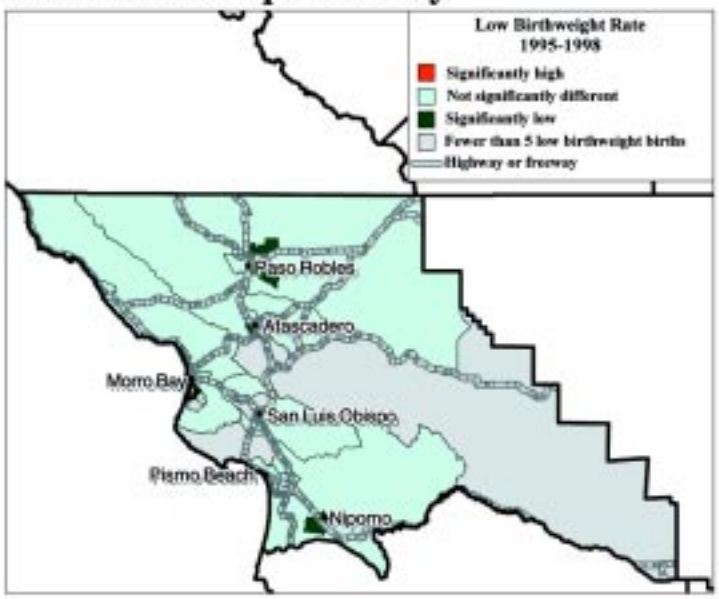


African American low birthweight births

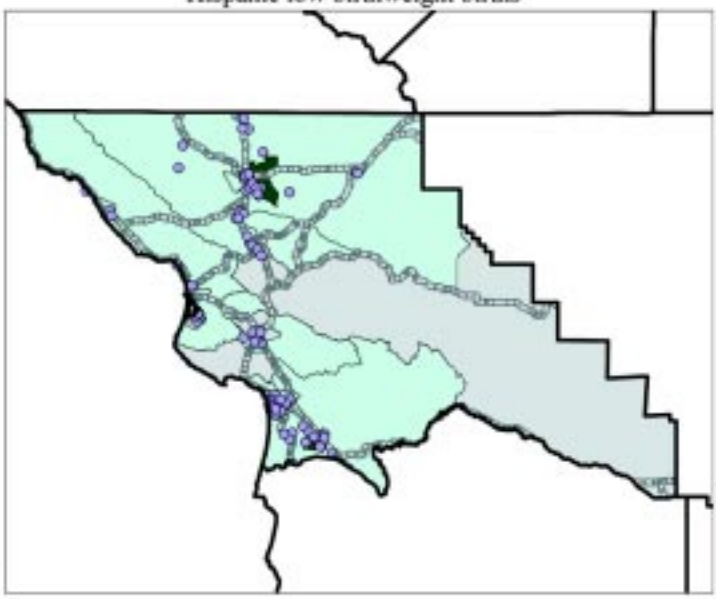


American Indian/Alaska Native low birthweight births

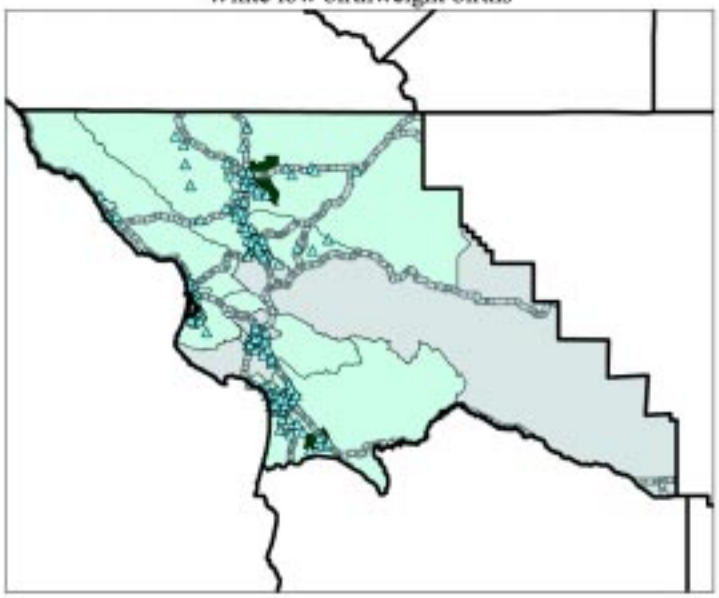
San Luis Obispo County



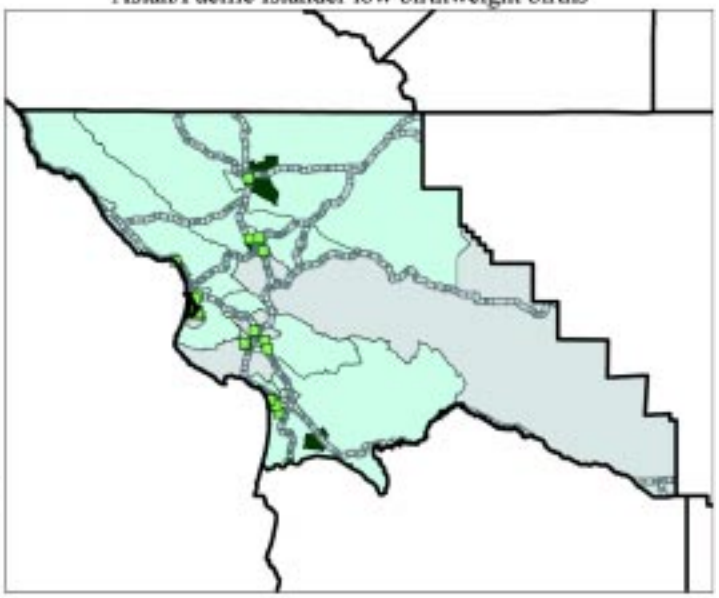
Hispanic low birthweight births



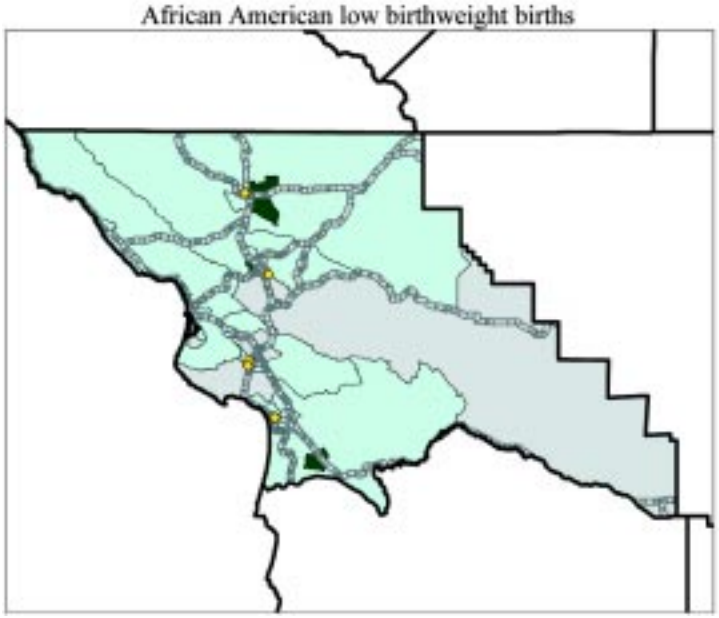
White low birthweight births



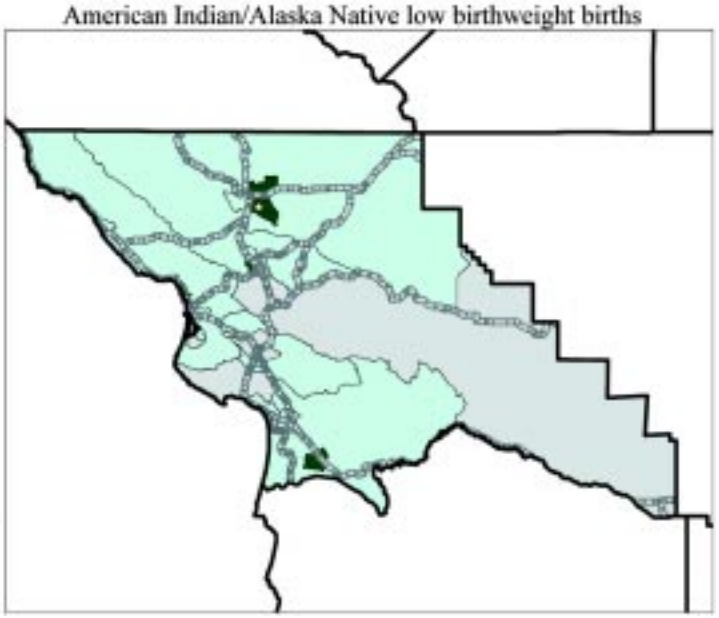
Asian/Pacific Islander low birthweight births



African American low birthweight births

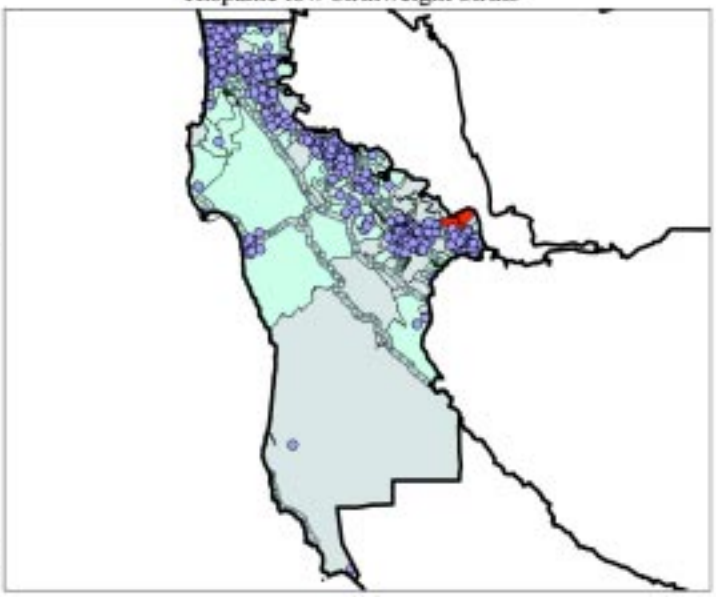


American Indian/Alaska Native low birthweight births

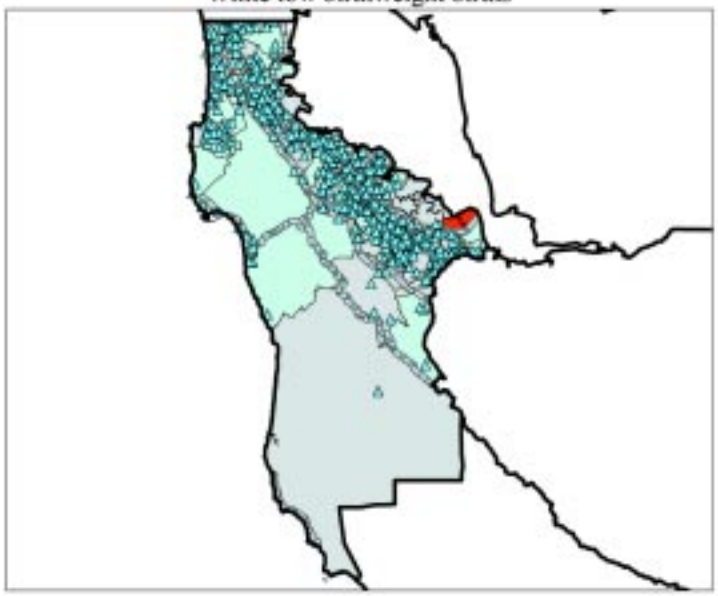


San Mateo County

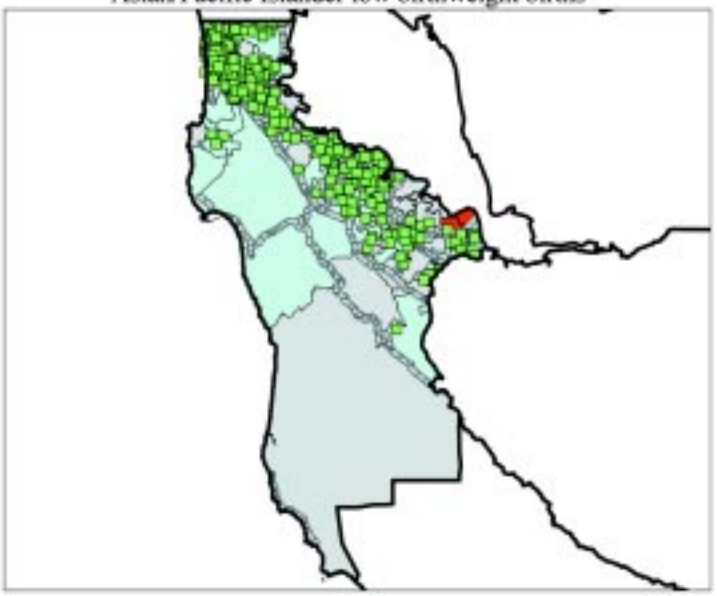
Hispanic low birthweight births



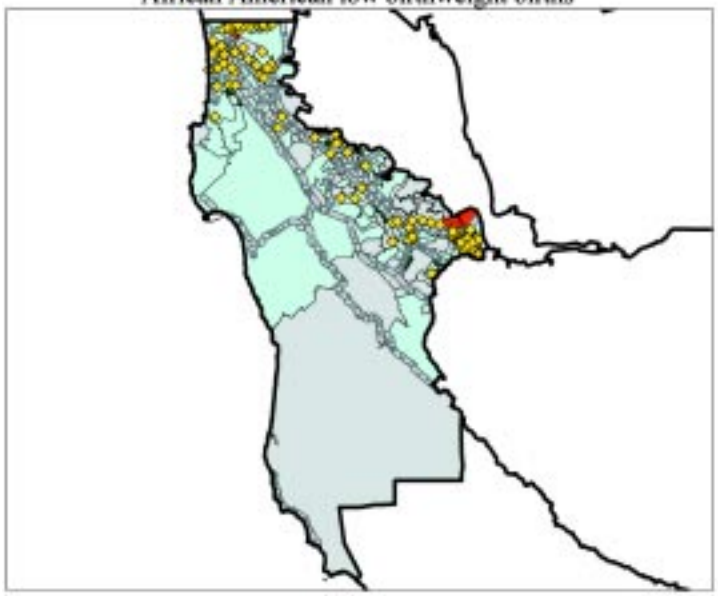
White low birthweight births



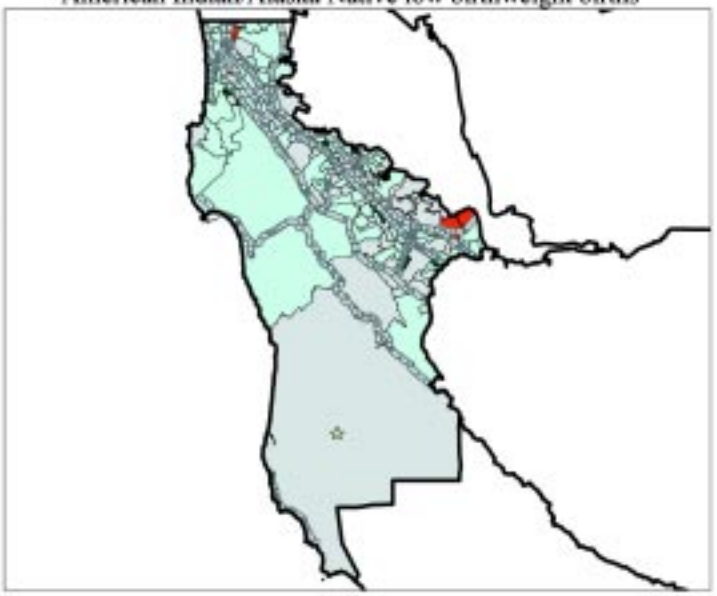
Asian/Pacific Islander low birthweight births



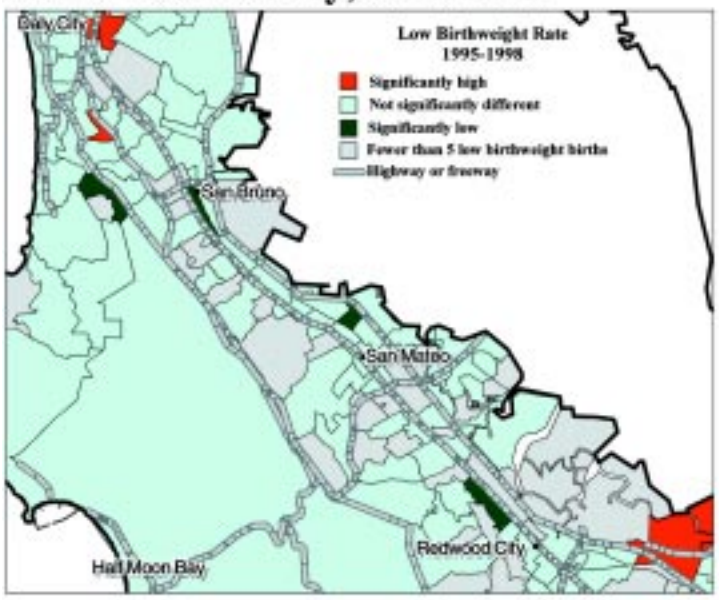
African American low birthweight births



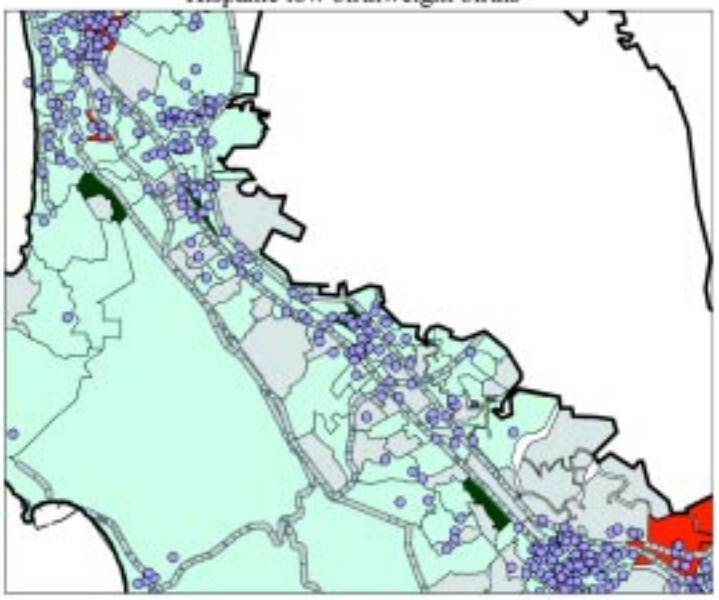
American Indian/Alaska Native low birthweight births



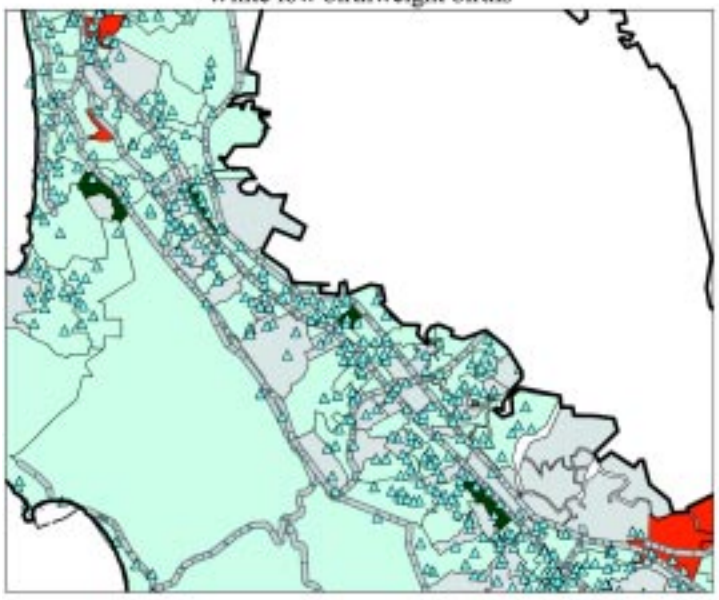
San Mateo County, continued



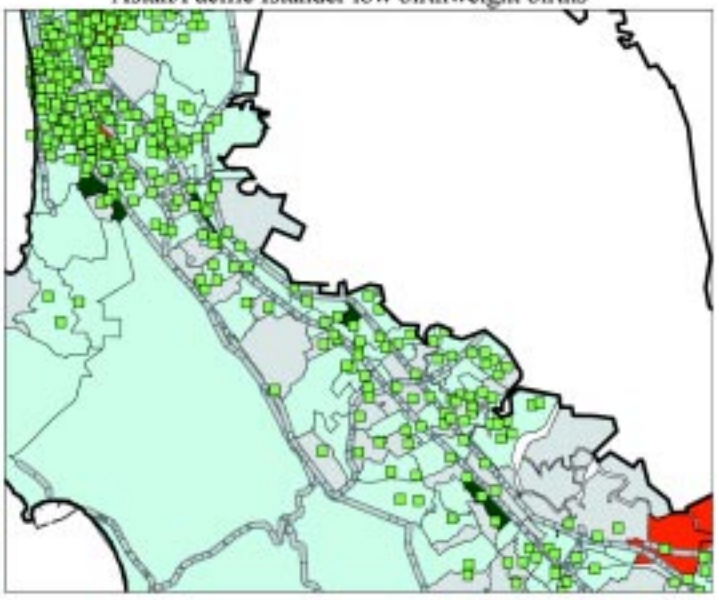
Hispanic low birthweight births



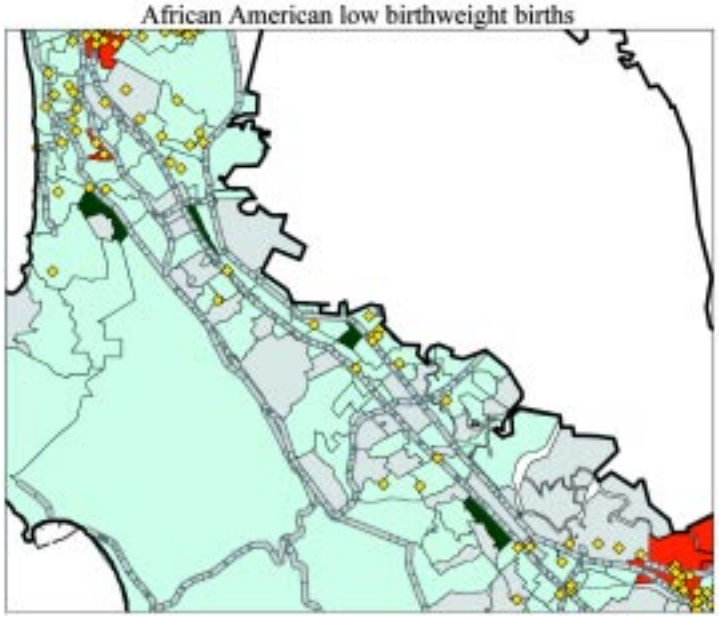
White low birthweight births



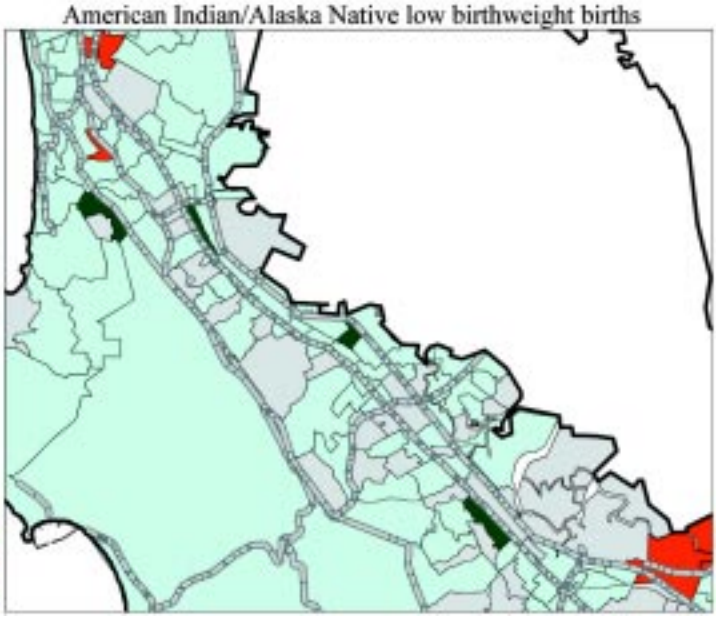
Asian/Pacific Islander low birthweight births



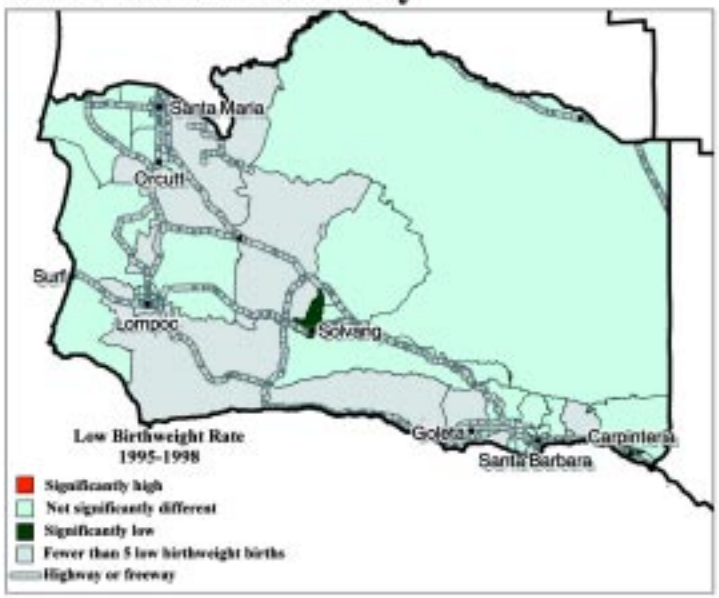
African American low birthweight births



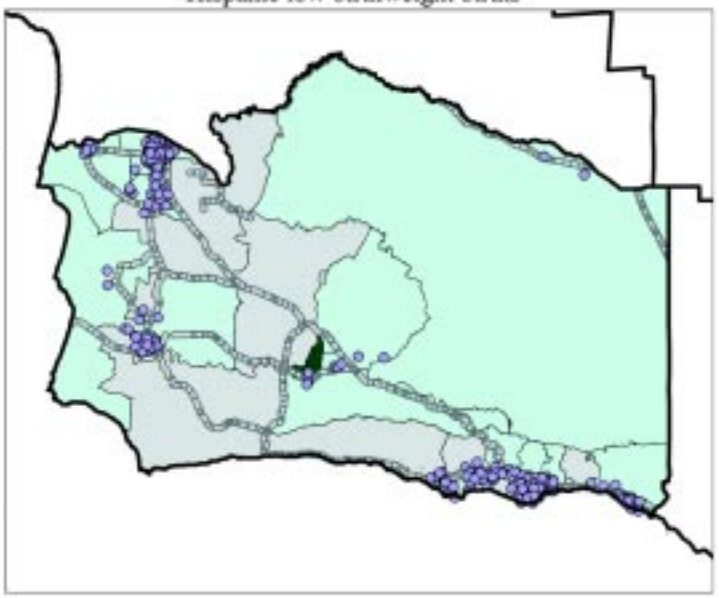
American Indian/Alaska Native low birthweight births



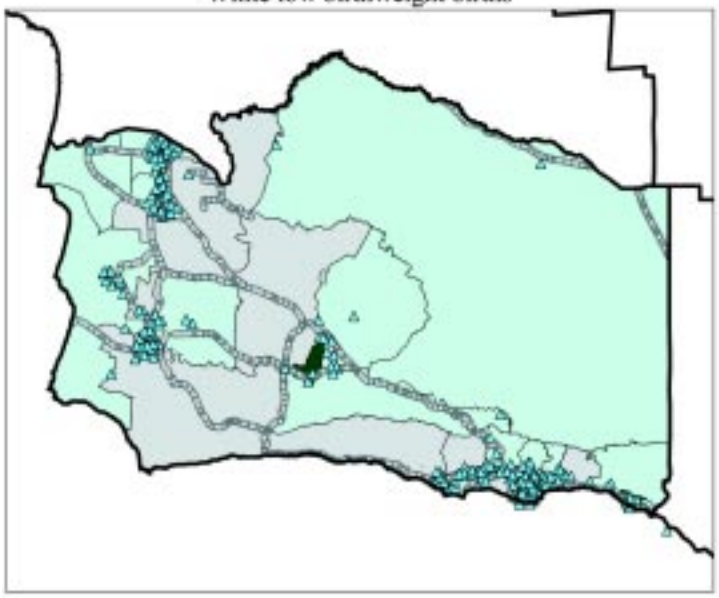
Santa Barbara County



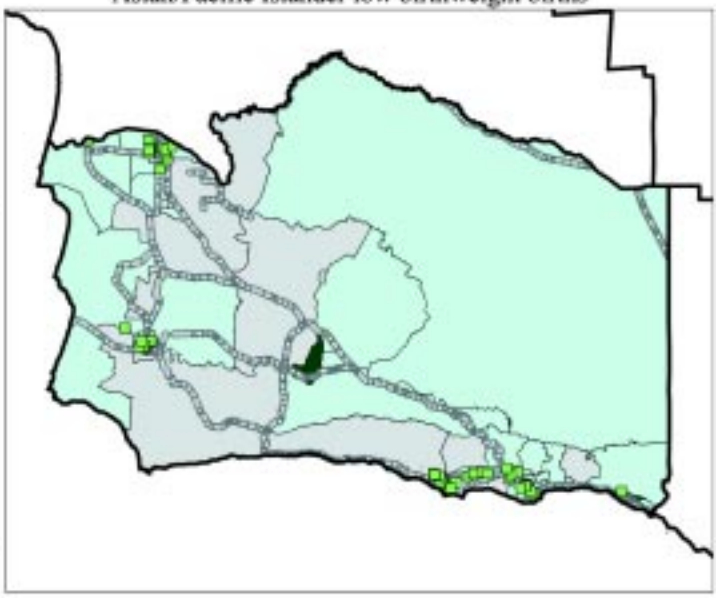
Hispanic low birthweight births



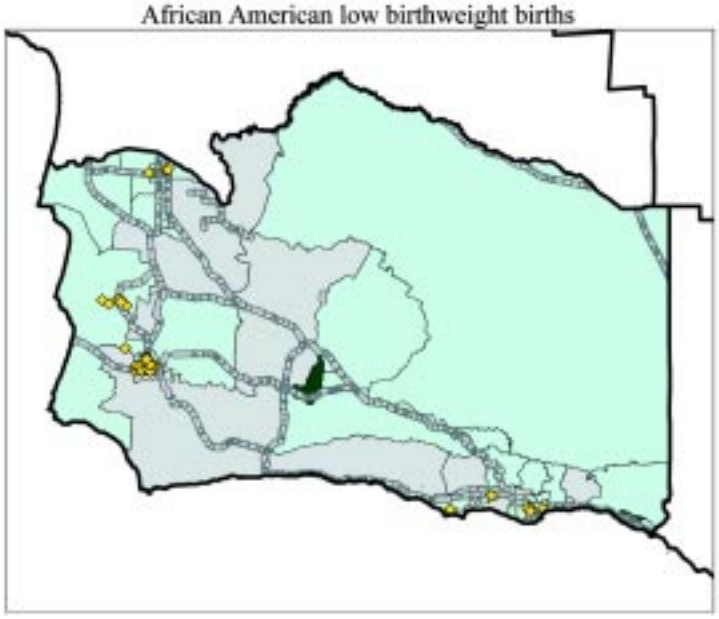
White low birthweight births



Asian/Pacific Islander low birthweight births

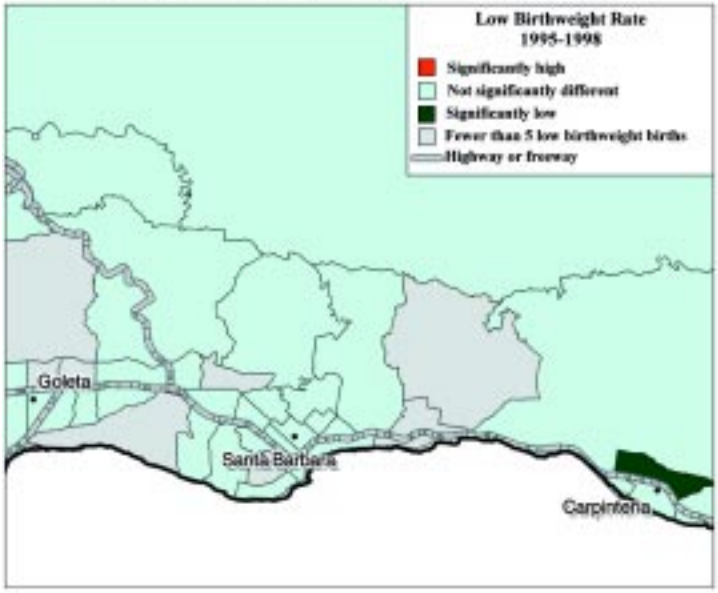


African American low birthweight births

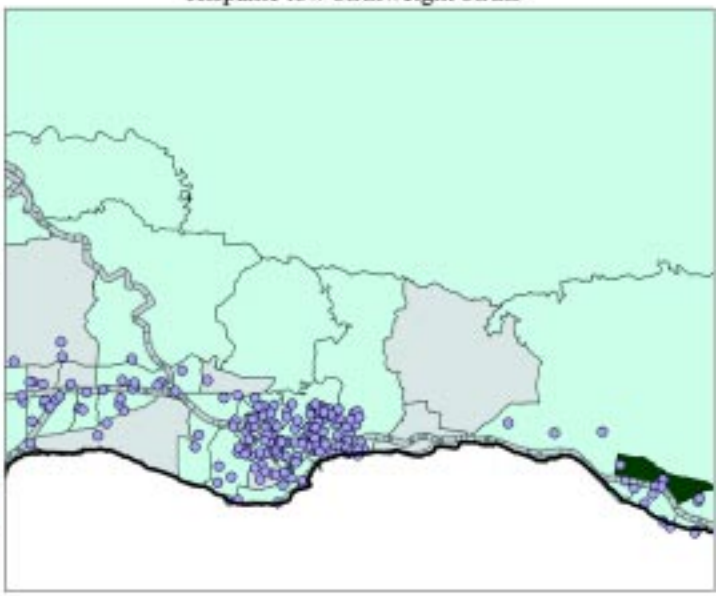


American Indian/Alaska Native low birthweight births

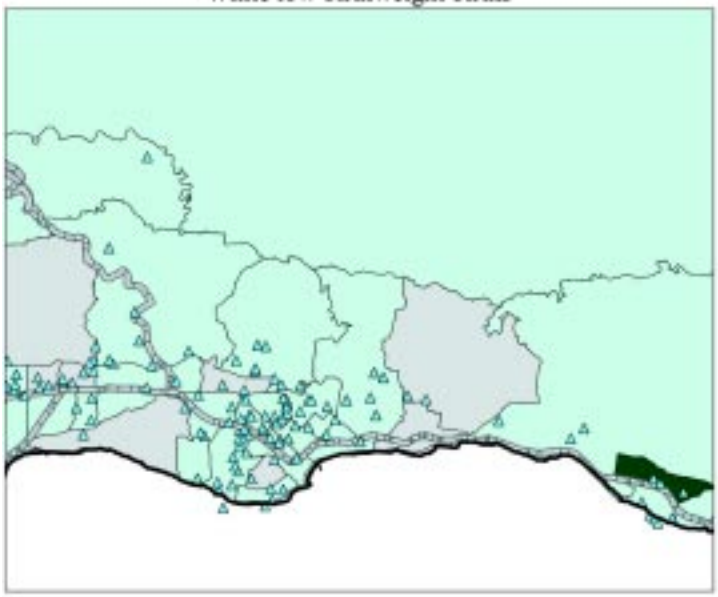
Santa Barbara County, continued



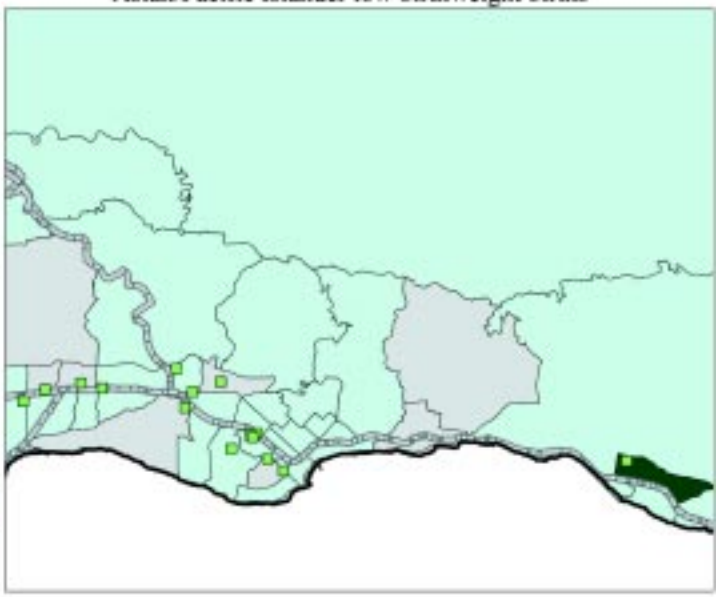
Hispanic low birthweight births



White low birthweight births

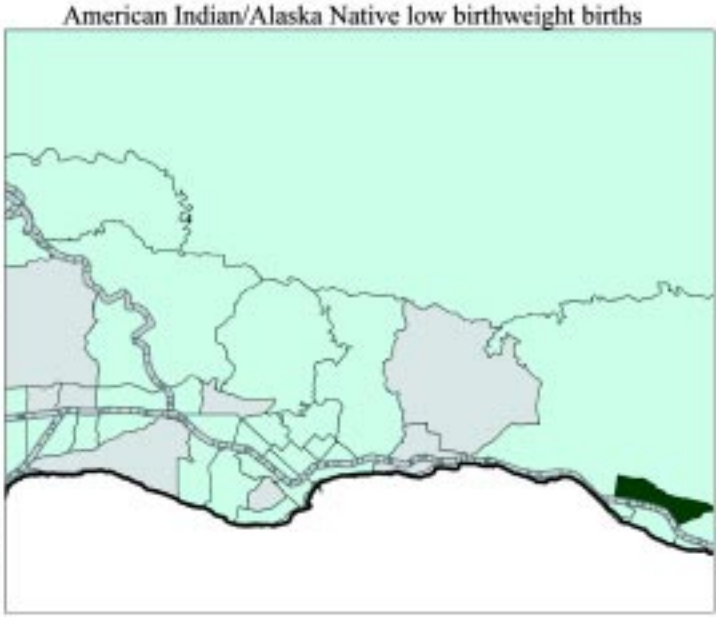


Asian/Pacific Islander low birthweight births

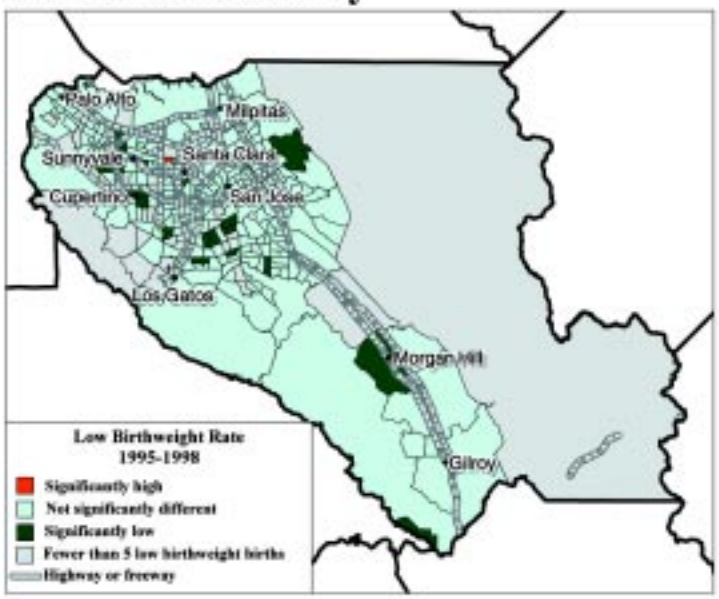


African American low birthweight births

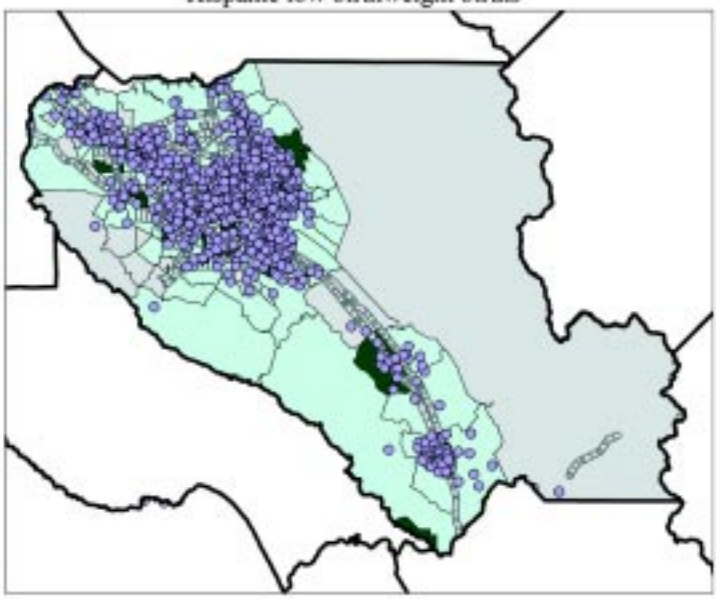
American Indian/Alaska Native low birthweight births



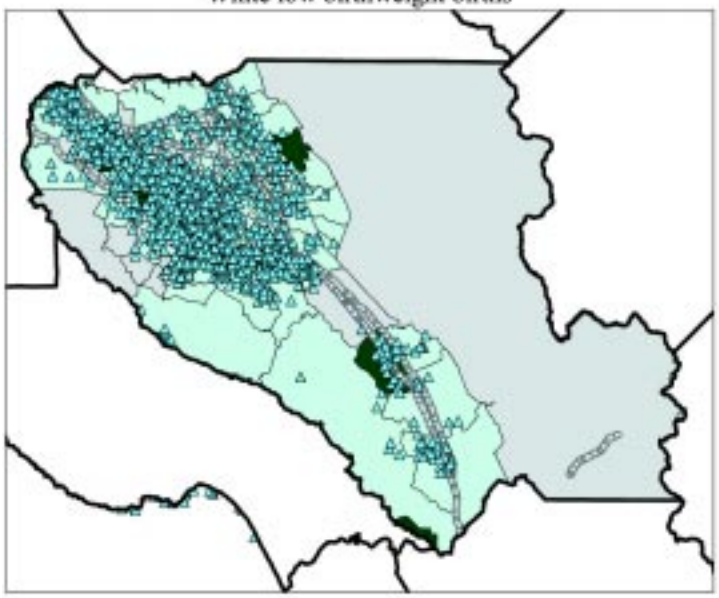
Santa Clara County



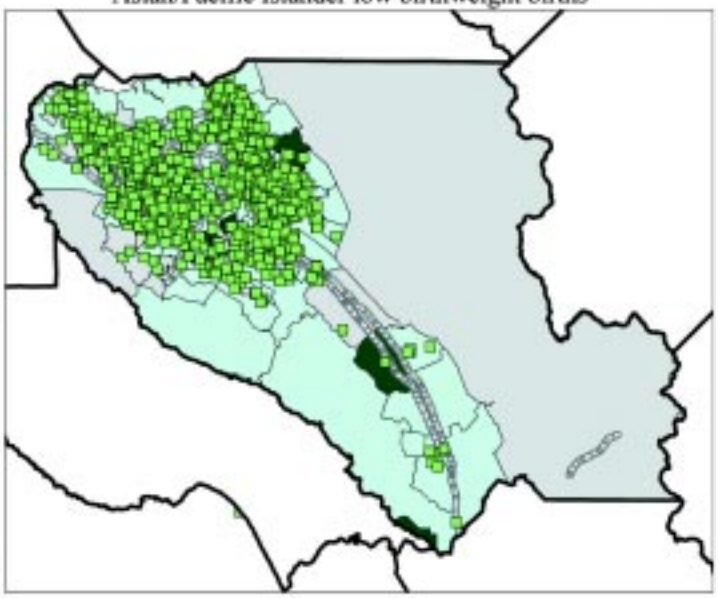
Hispanic low birthweight births



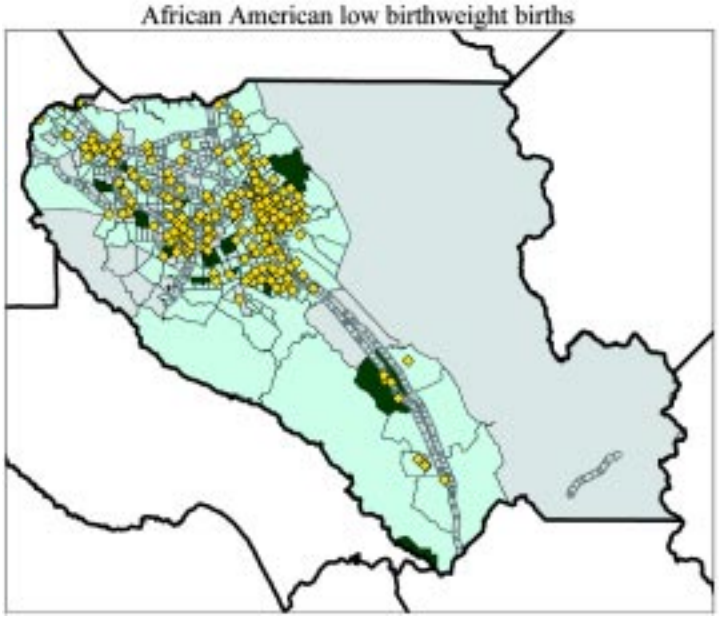
White low birthweight births



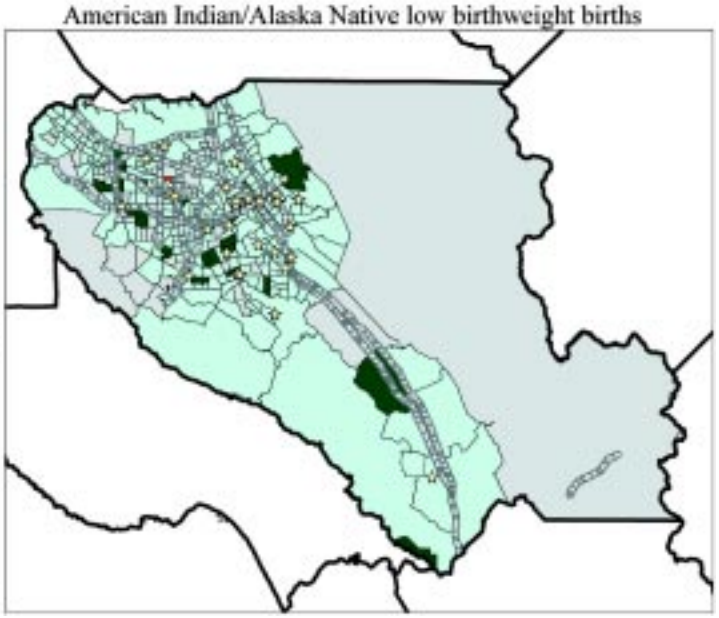
Asian/Pacific Islander low birthweight births



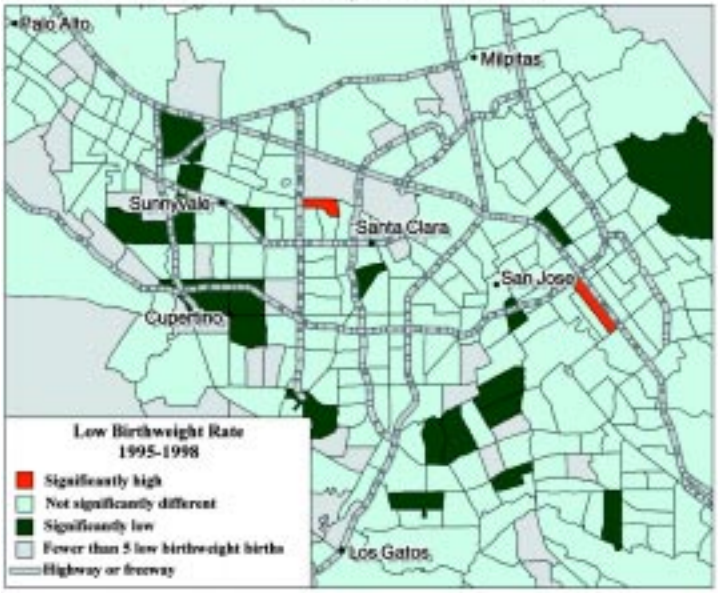
African American low birthweight births



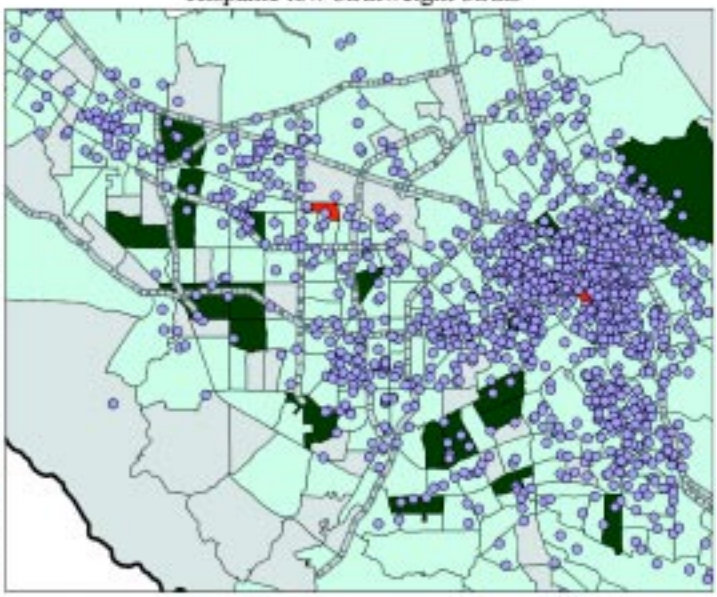
American Indian/Alaska Native low birthweight births



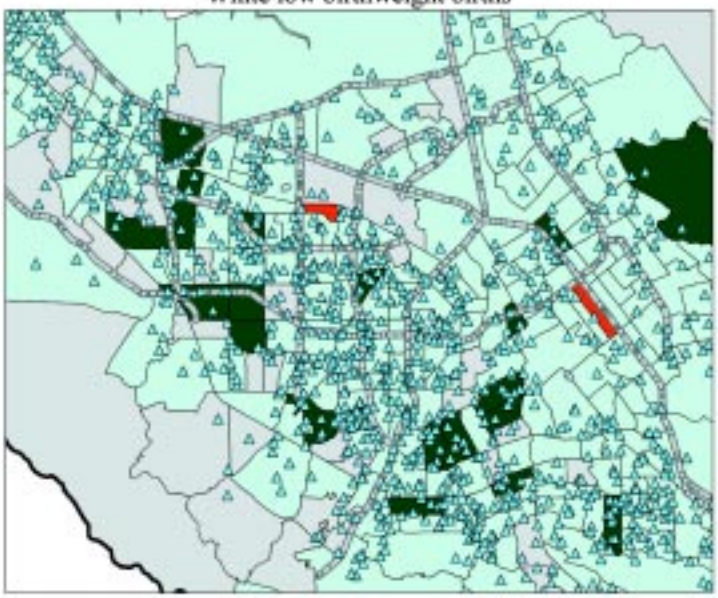
Santa Clara County, continued



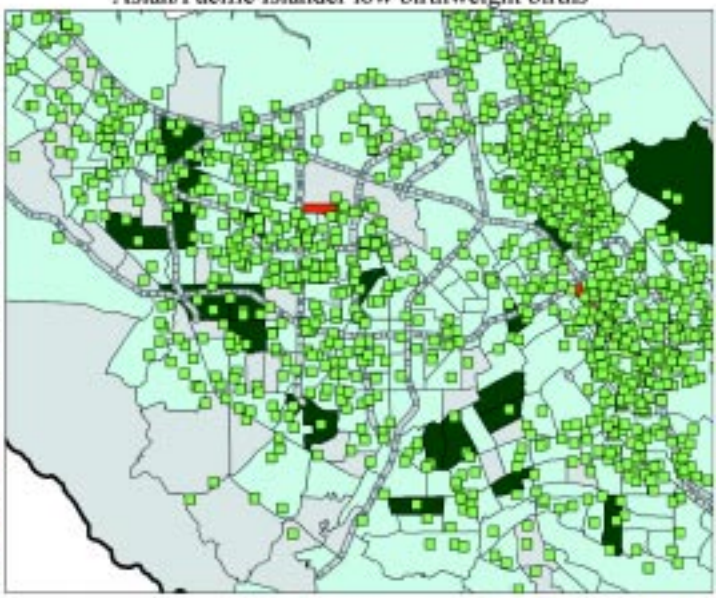
Hispanic low birthweight births



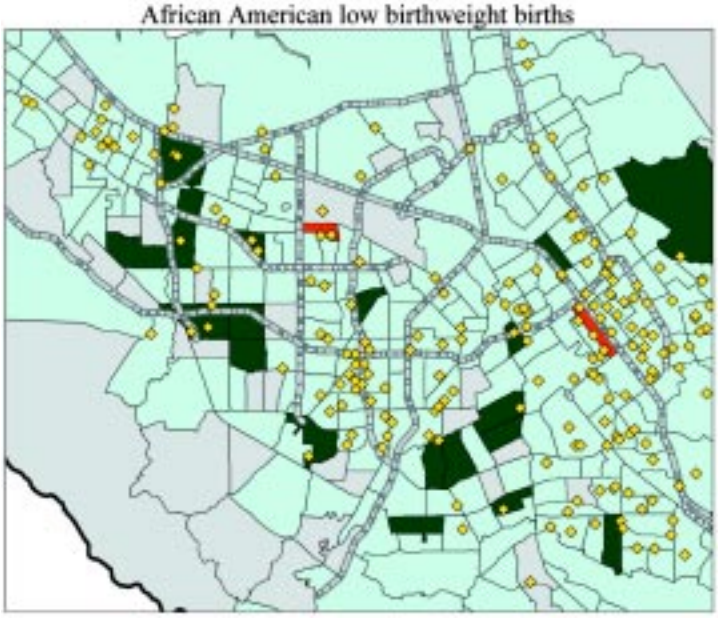
White low birthweight births



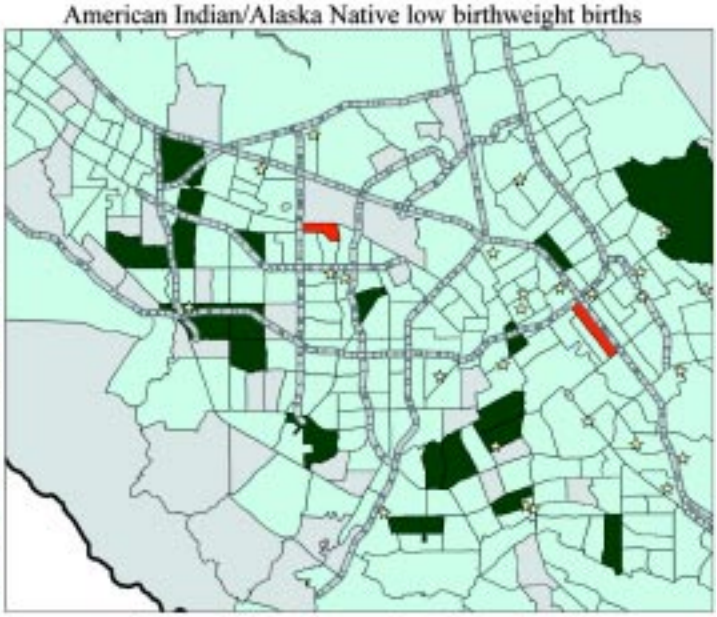
Asian/Pacific Islander low birthweight births



African American low birthweight births

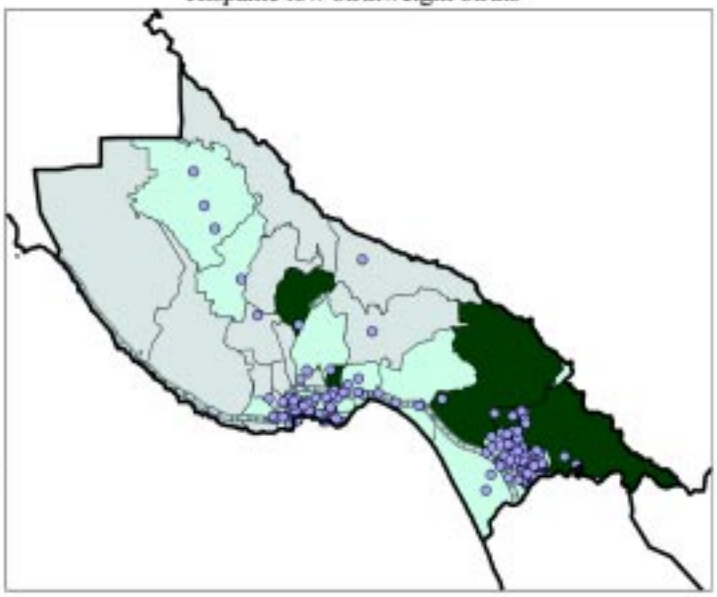


American Indian/Alaska Native low birthweight births

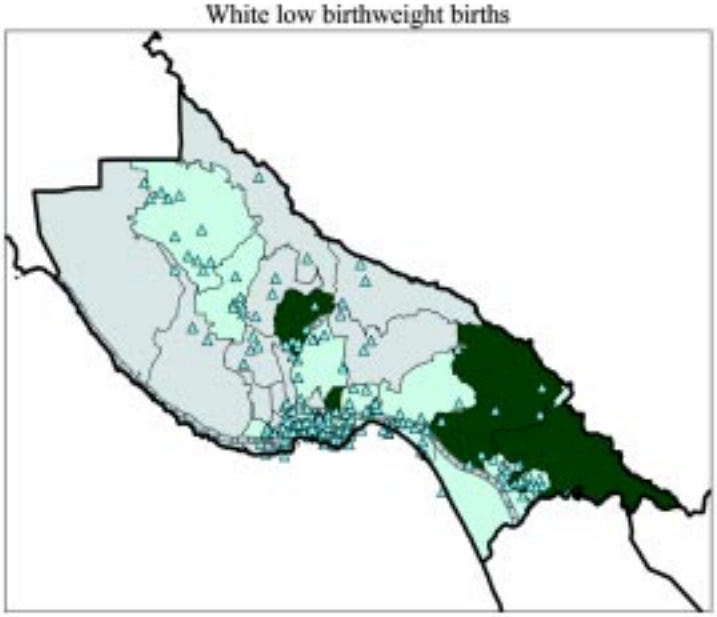


Santa Cruz County

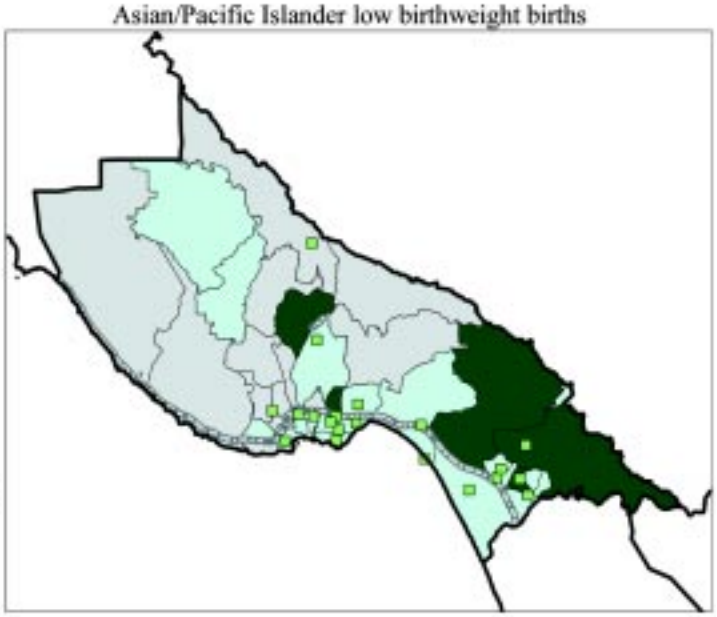
Hispanic low birthweight births



White low birthweight births

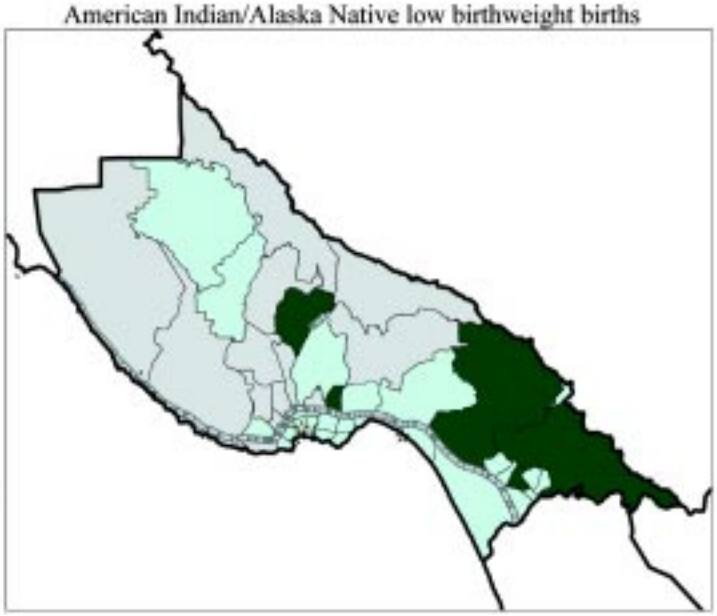


Asian/Pacific Islander low birthweight births



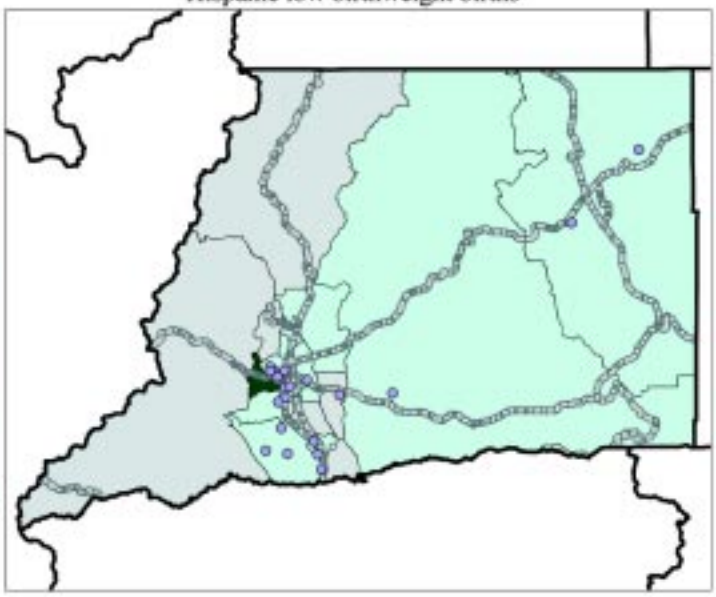
African American low birthweight births

American Indian/Alaska Native low birthweight births

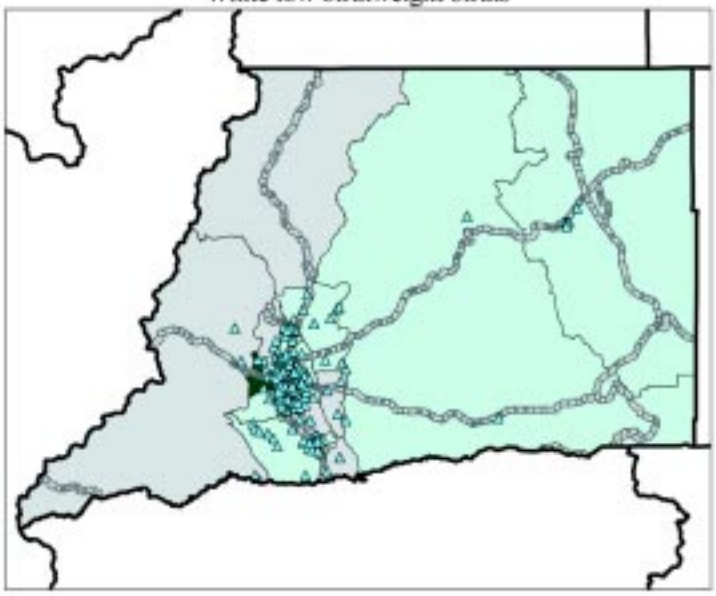


Shasta County

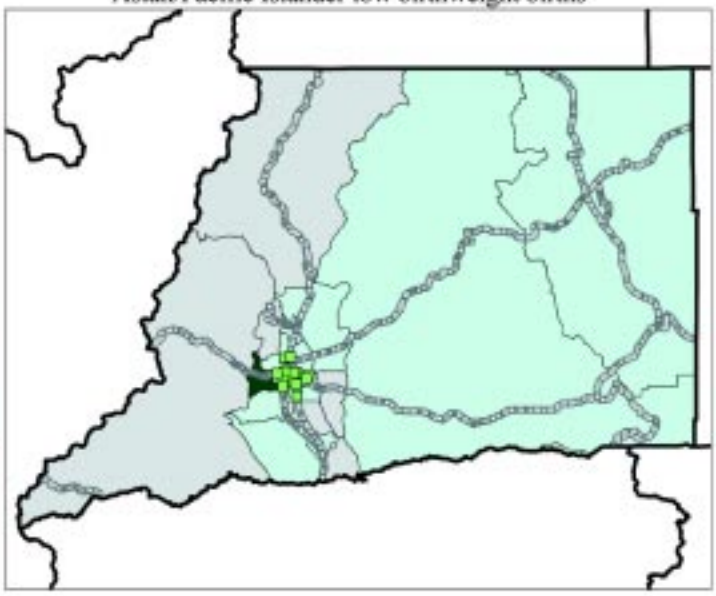
Hispanic low birthweight births



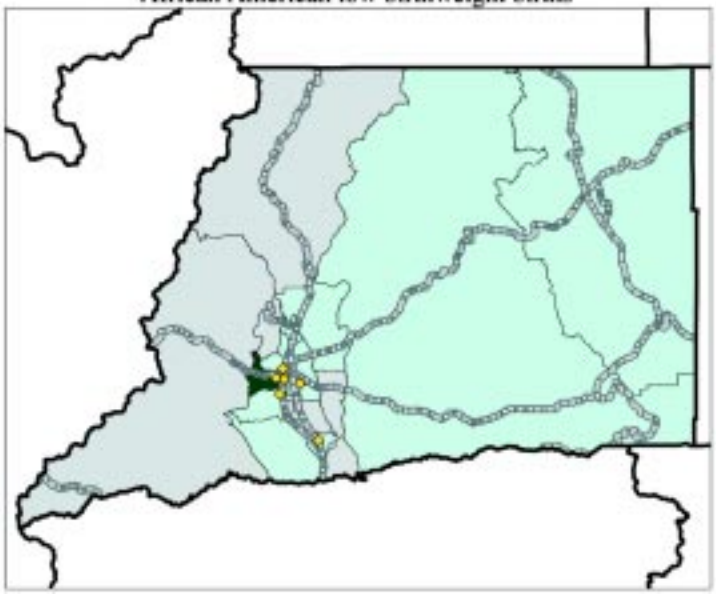
White low birthweight births



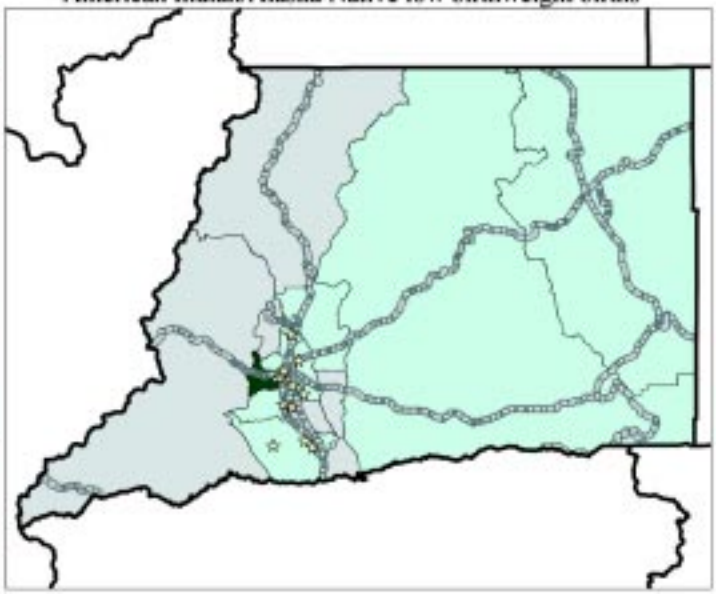
Asian/Pacific Islander low birthweight births



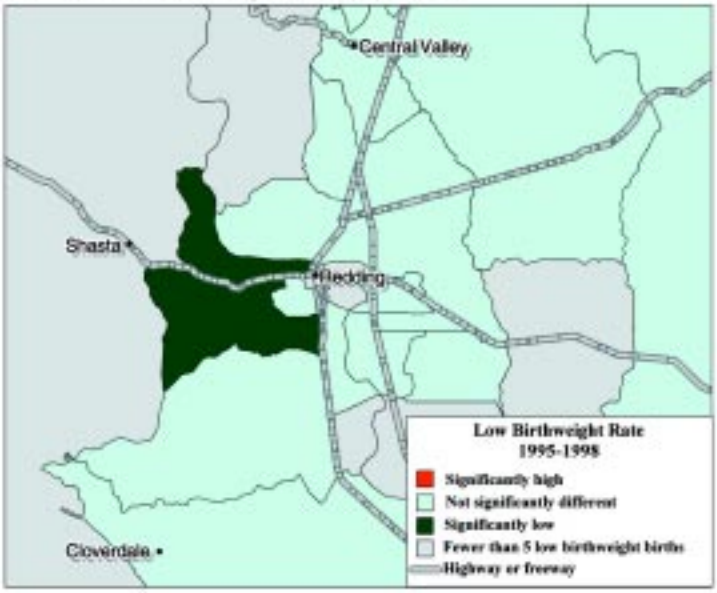
African American low birthweight births



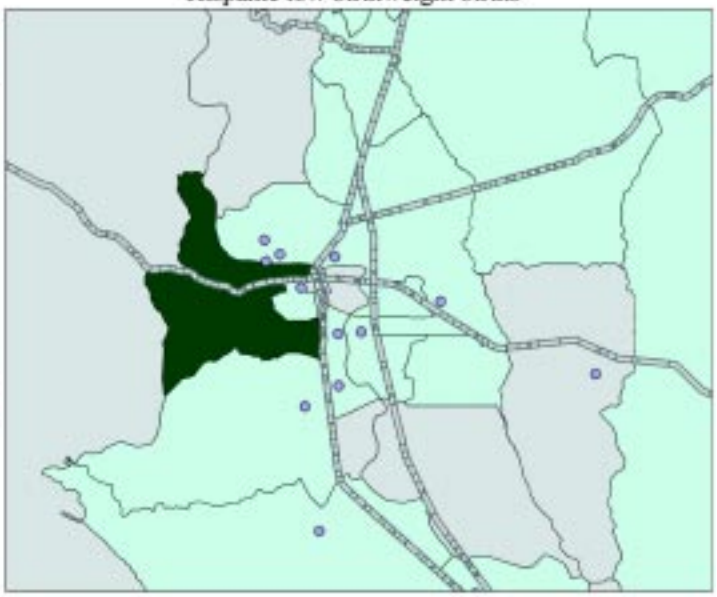
American Indian/Alaska Native low birthweight births



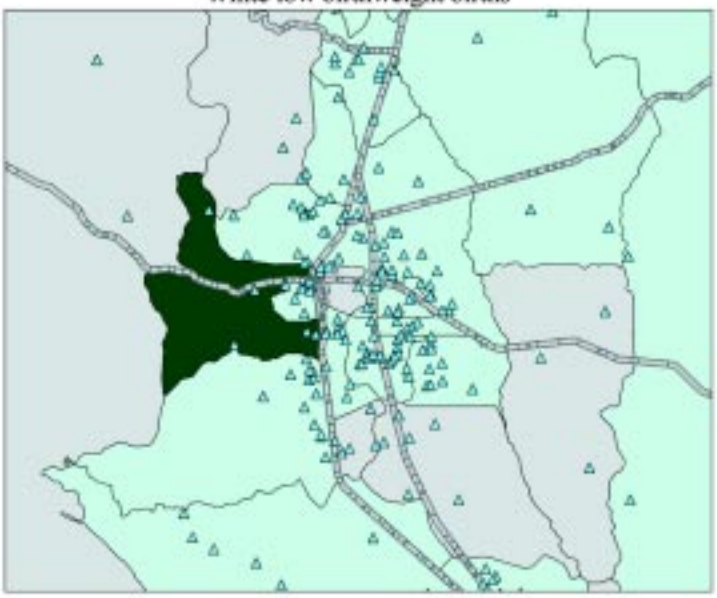
Shasta County, continued



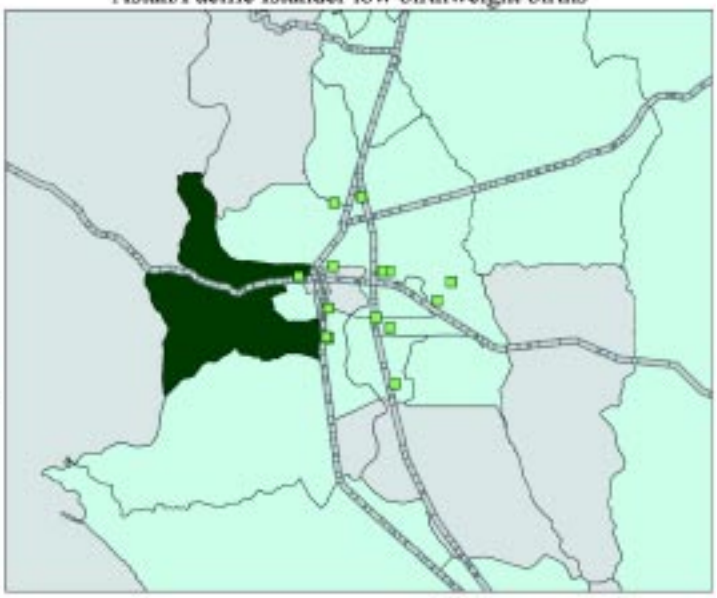
Hispanic low birthweight births



White low birthweight births



Asian/Pacific Islander low birthweight births

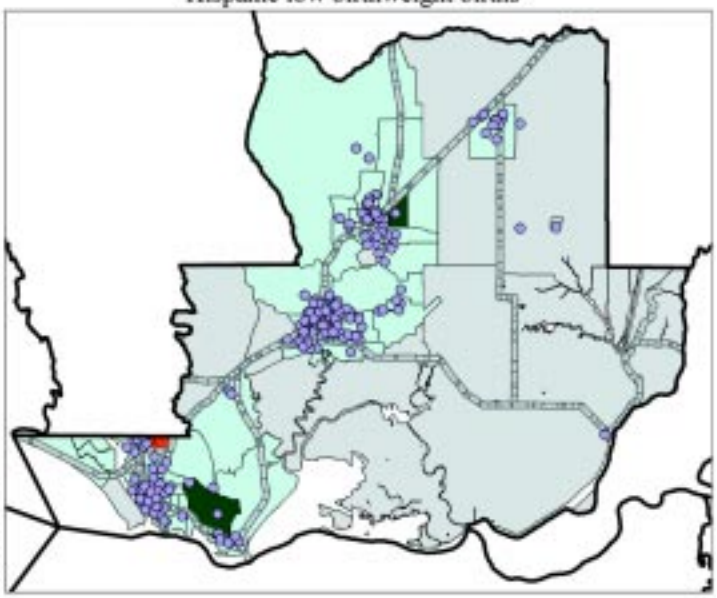


African American low birthweight births

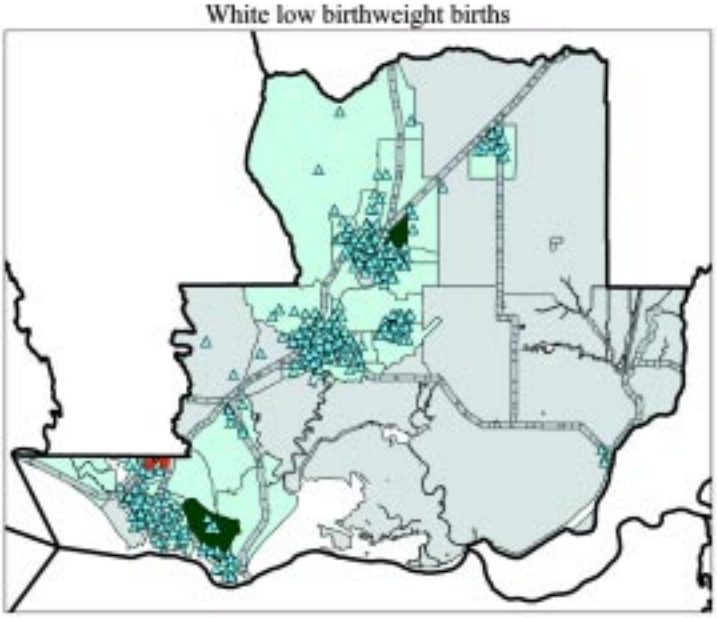
American Indian/Alaska Native low birthweight births

Solano County

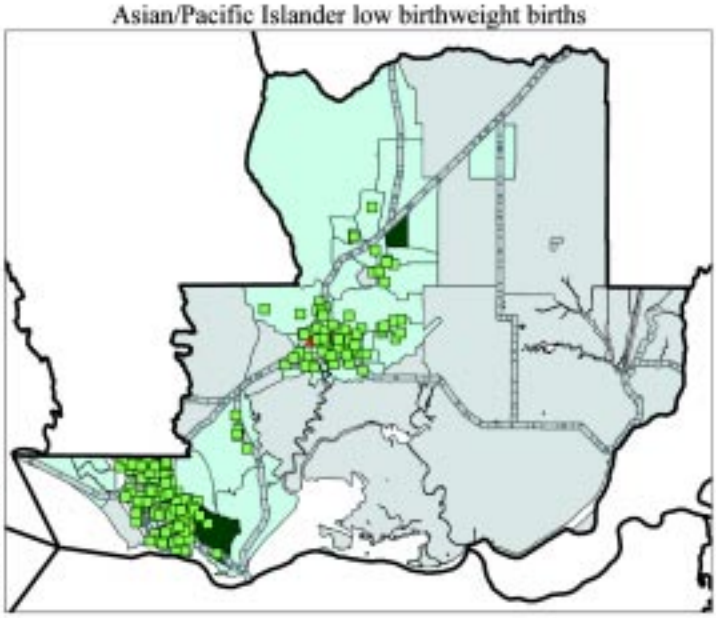
Hispanic low birthweight births



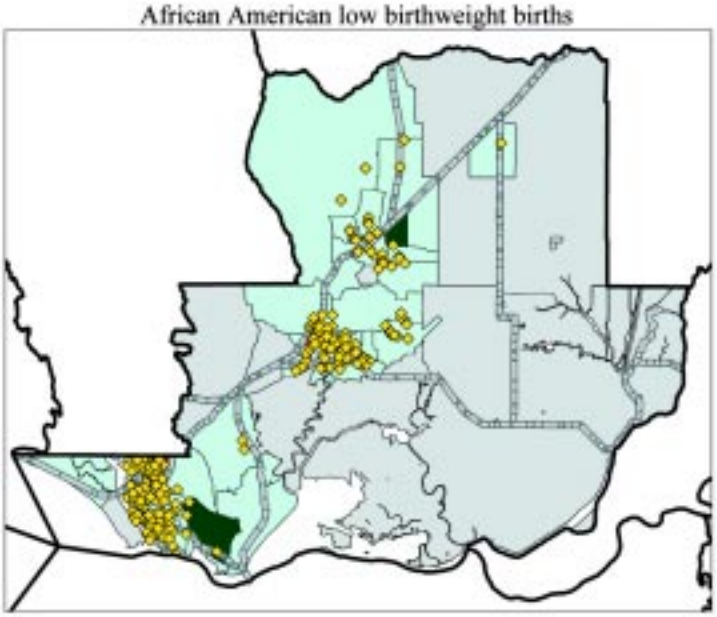
White low birthweight births



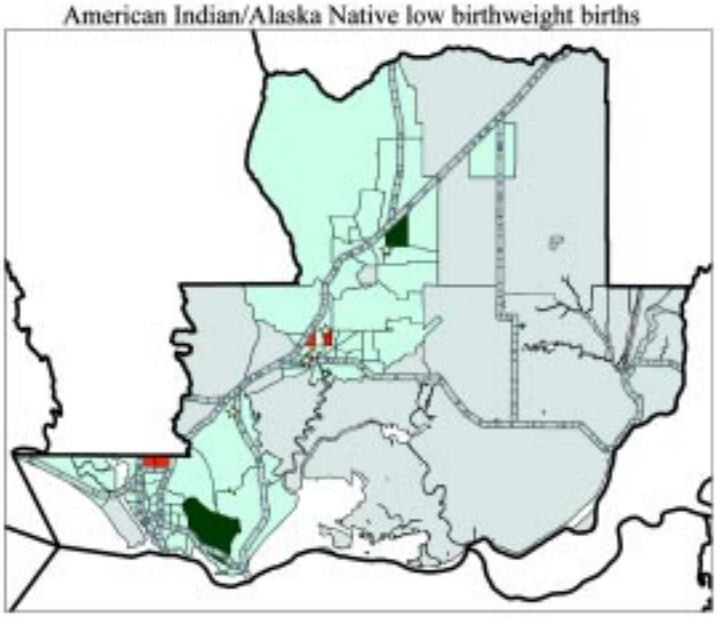
Asian/Pacific Islander low birthweight births



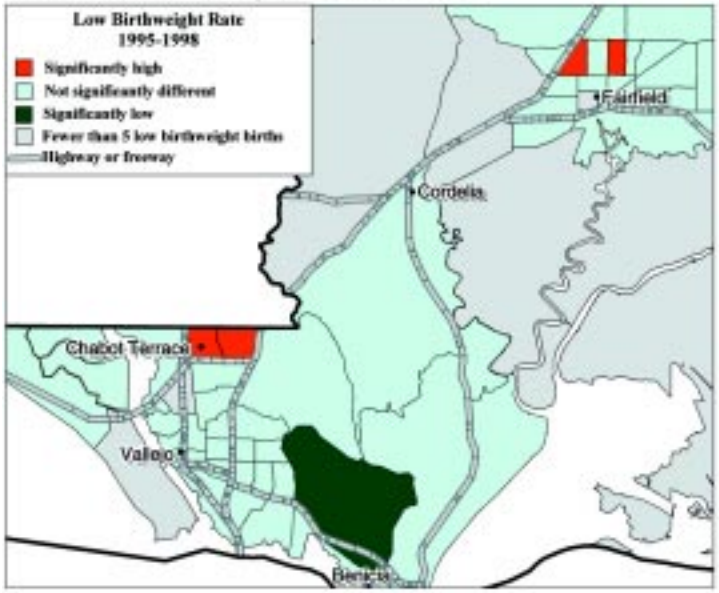
African American low birthweight births



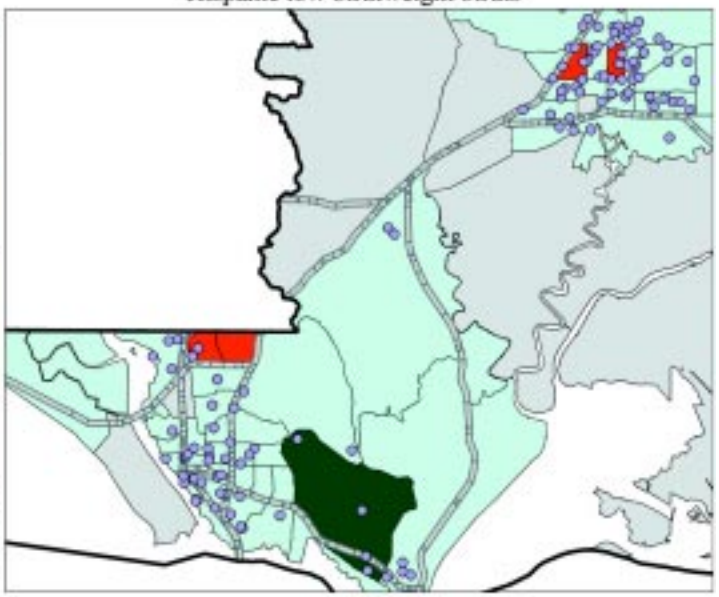
American Indian/Alaska Native low birthweight births



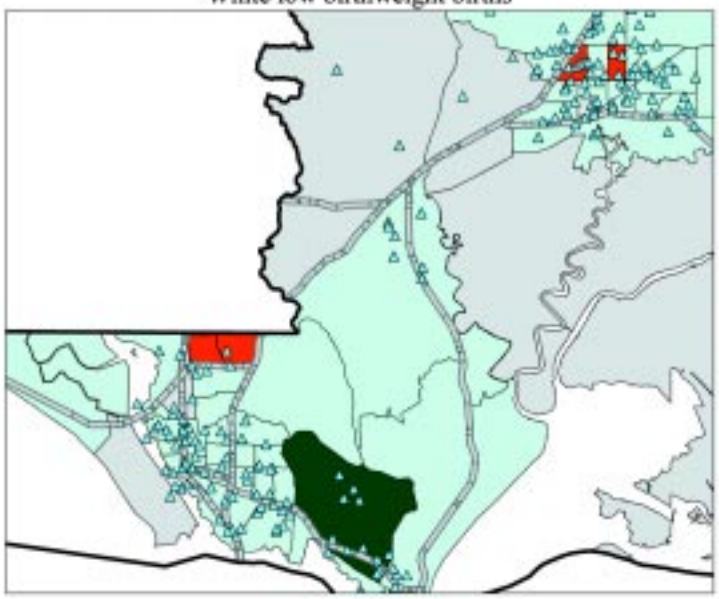
Solano County, continued



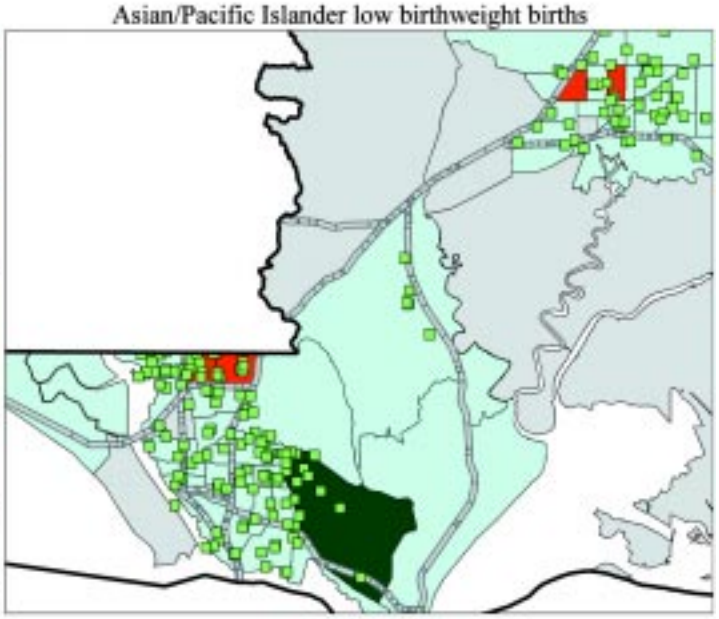
Hispanic low birthweight births



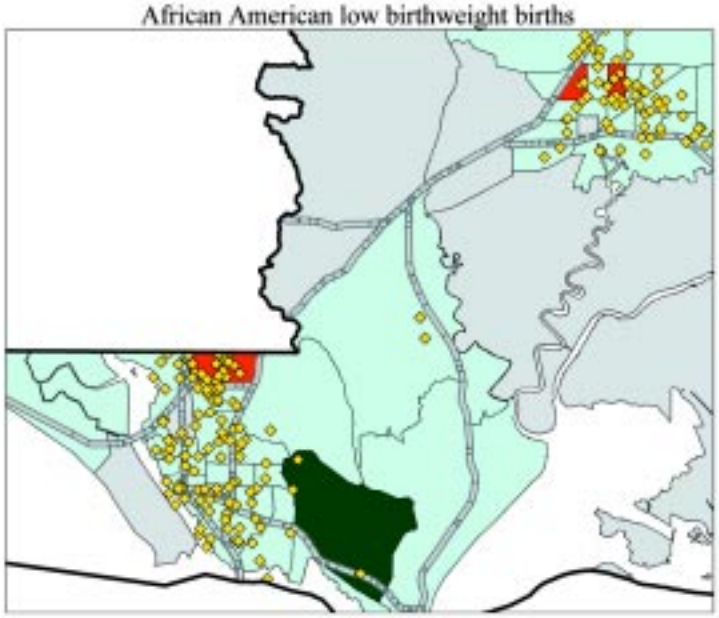
White low birthweight births



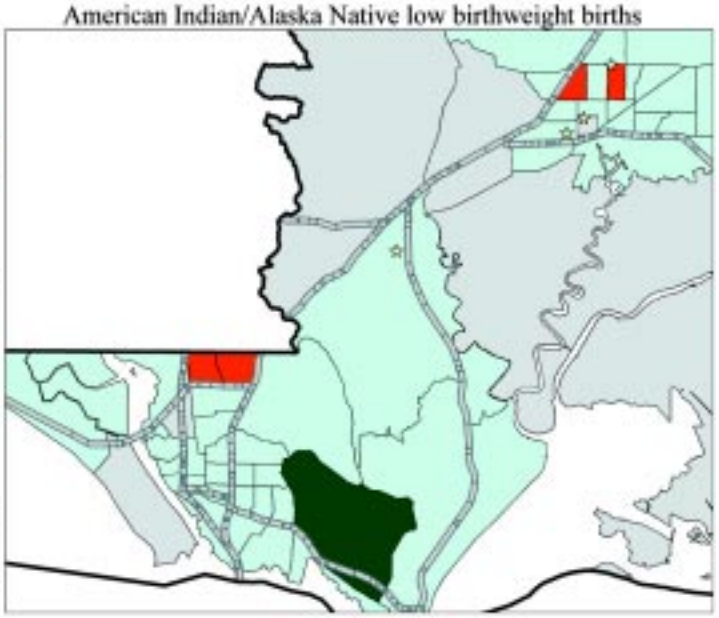
Asian/Pacific Islander low birthweight births



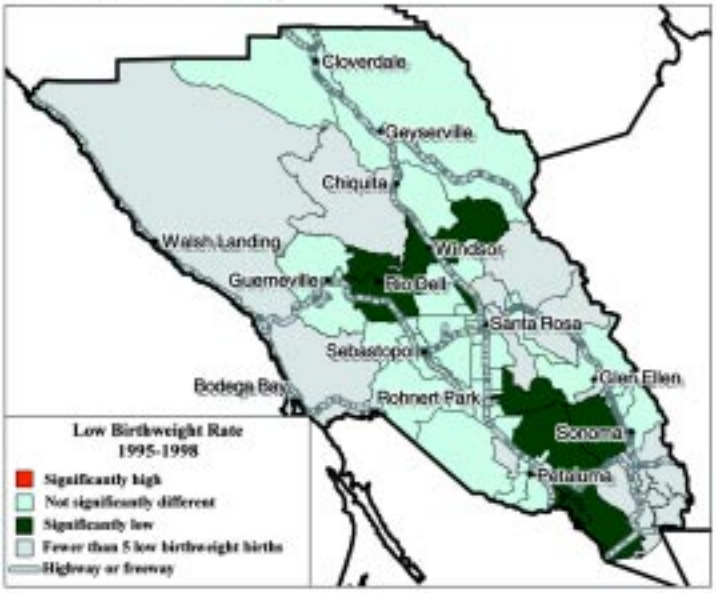
African American low birthweight births



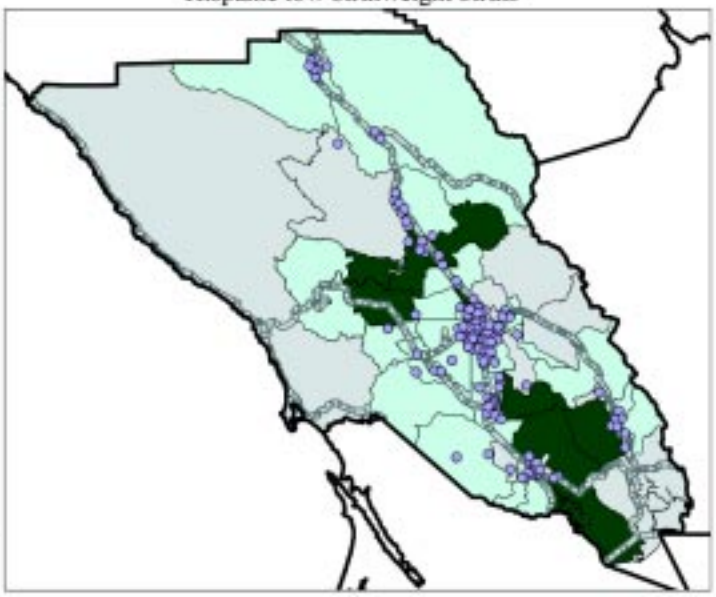
American Indian/Alaska Native low birthweight births



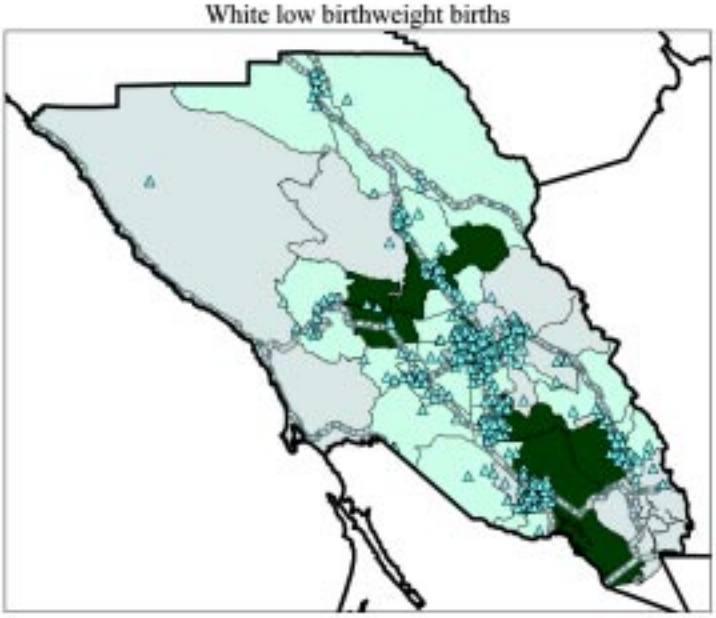
Sonoma County



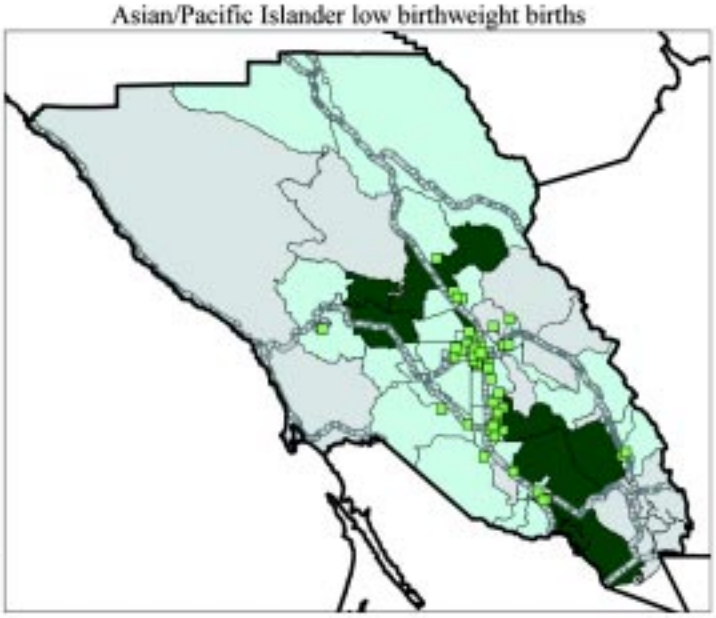
Hispanic low birthweight births



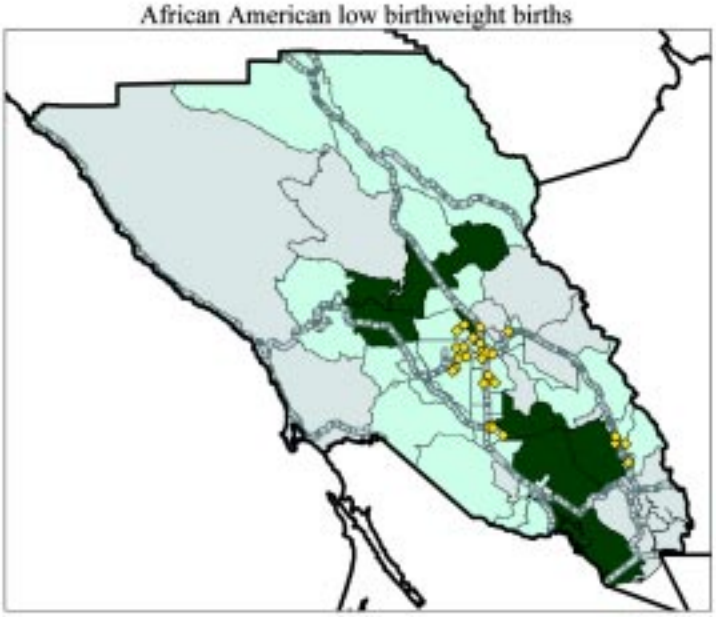
White low birthweight births



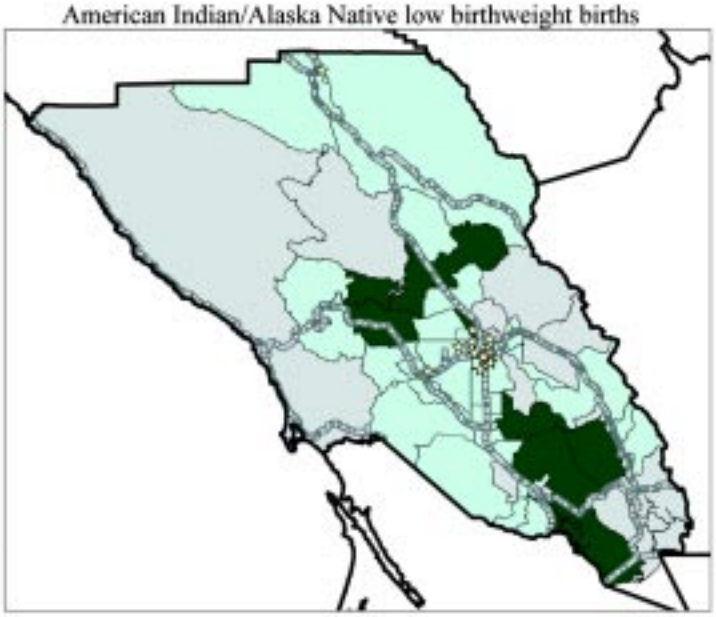
Asian/Pacific Islander low birthweight births



African American low birthweight births

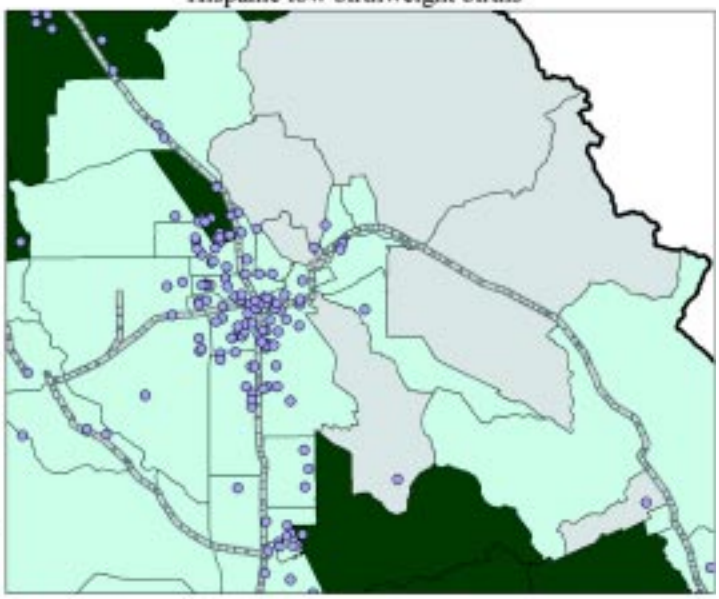


American Indian/Alaska Native low birthweight births

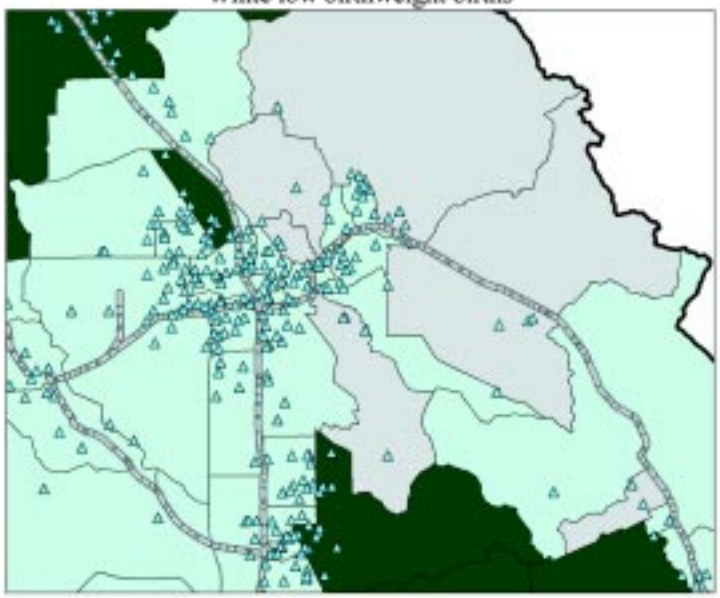


Sonoma County, continued

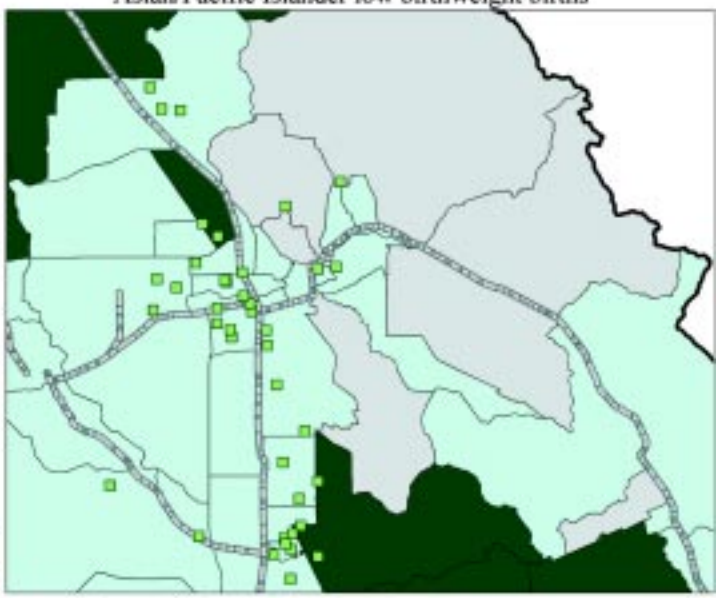
Hispanic low birthweight births



White low birthweight births



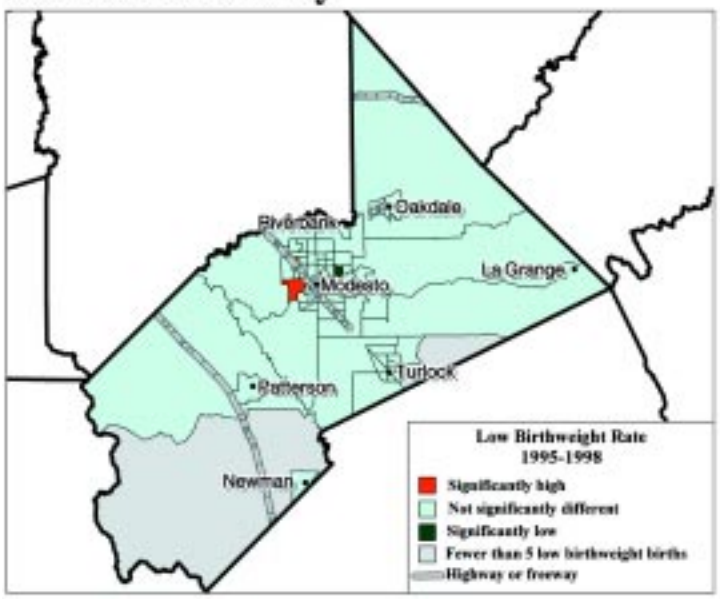
Asian/Pacific Islander low birthweight births



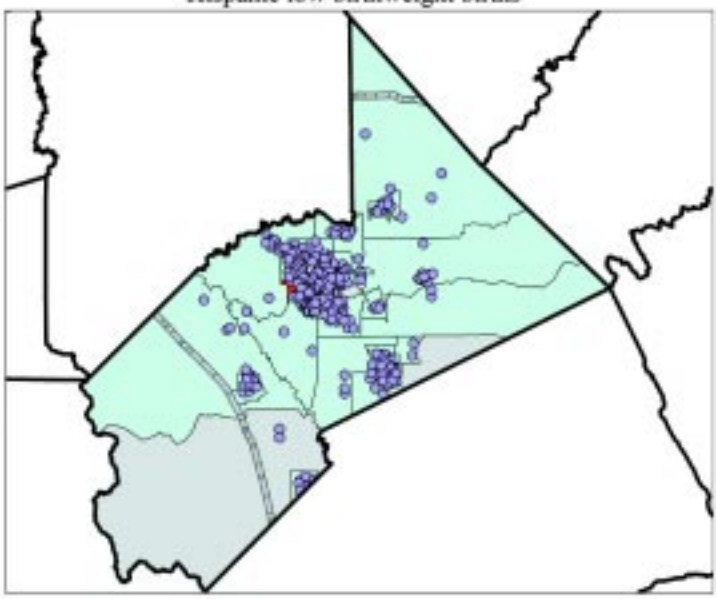
African American low birthweight births

American Indian/Alaska Native low birthweight births

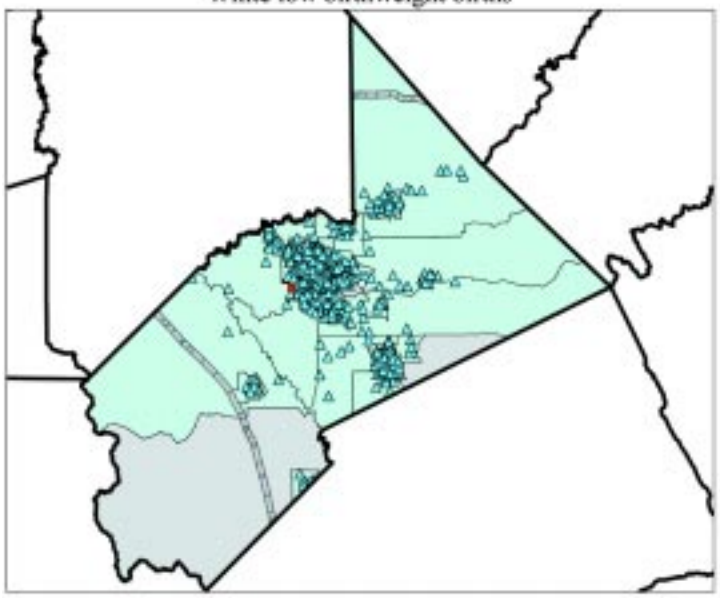
Stanislaus County



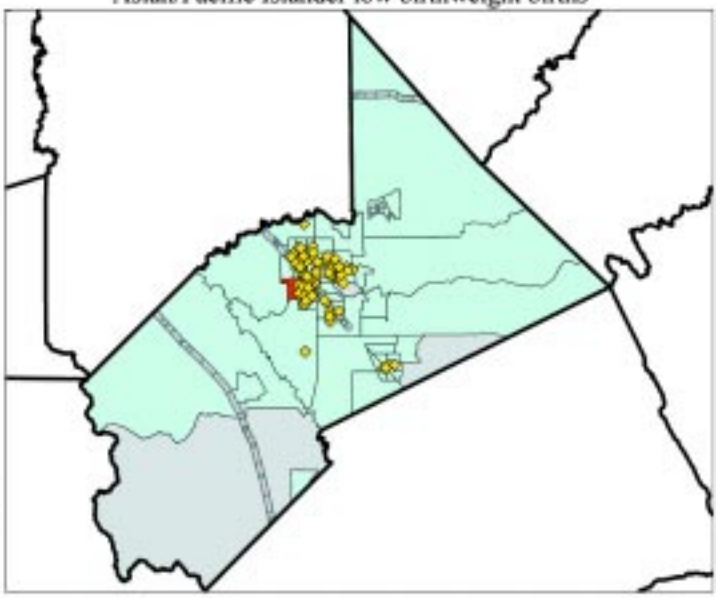
Hispanic low birthweight births



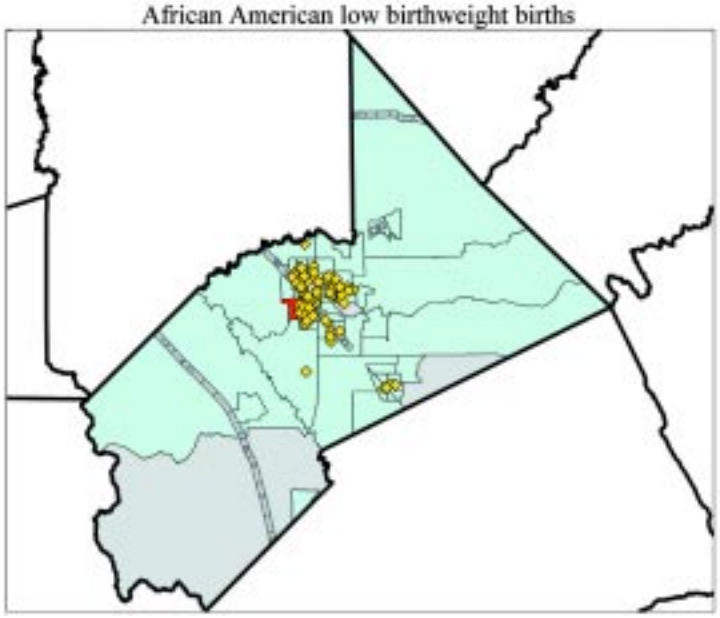
White low birthweight births



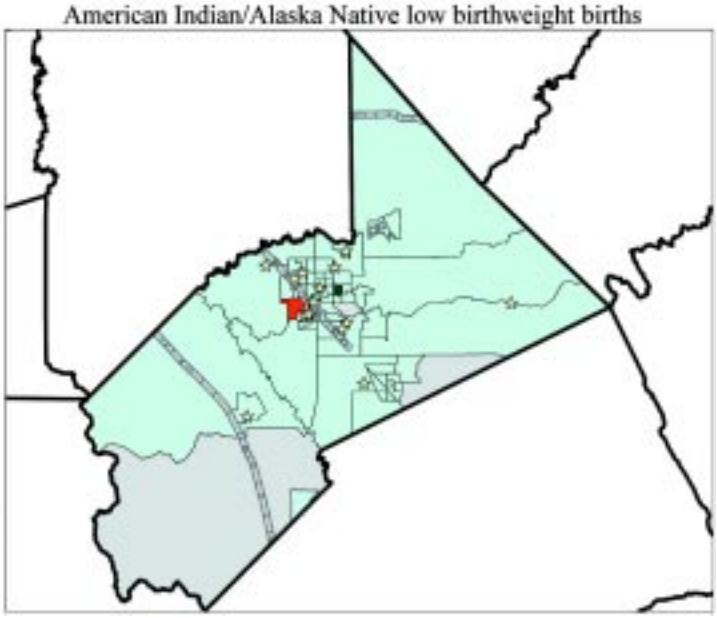
Asian/Pacific Islander low birthweight births



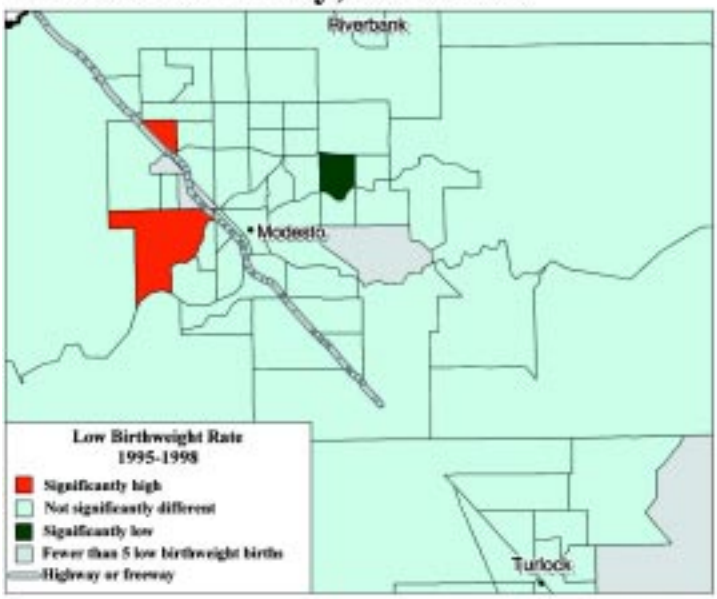
African American low birthweight births



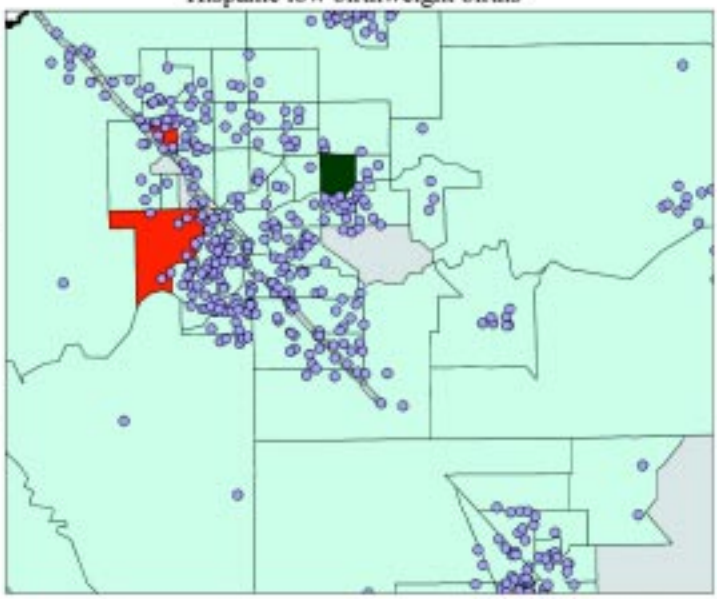
American Indian/Alaska Native low birthweight births



Stanislaus County, continued

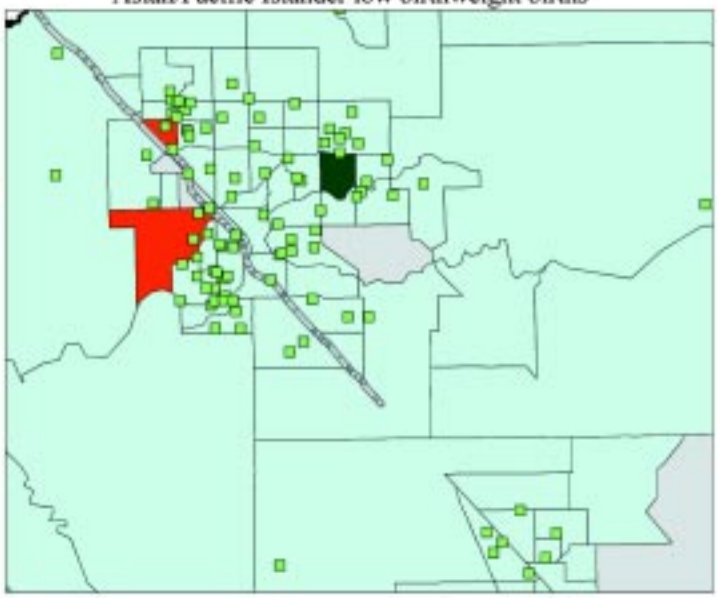


Hispanic low birthweight births



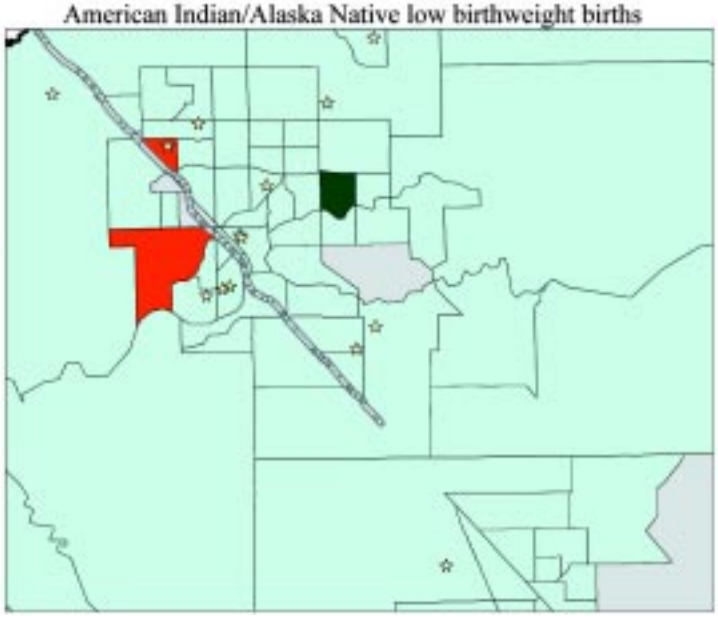
White low birthweight births

Asian/Pacific Islander low birthweight births

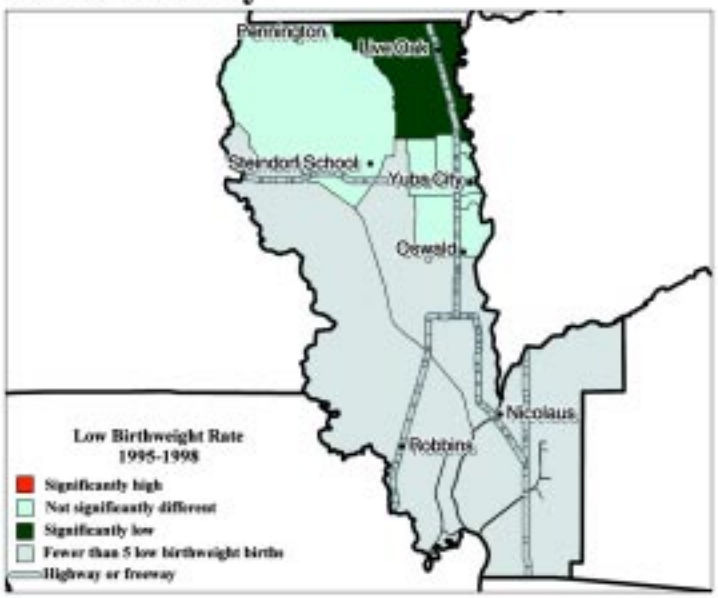


African American low birthweight births

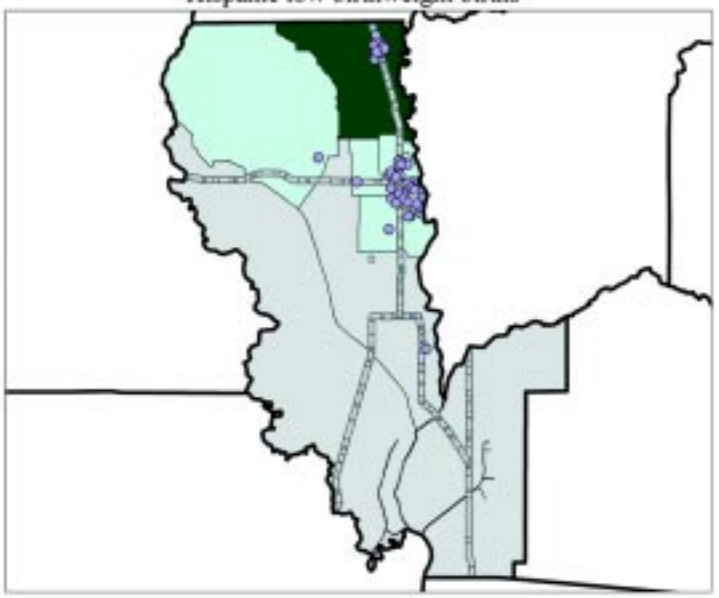
American Indian/Alaska Native low birthweight births



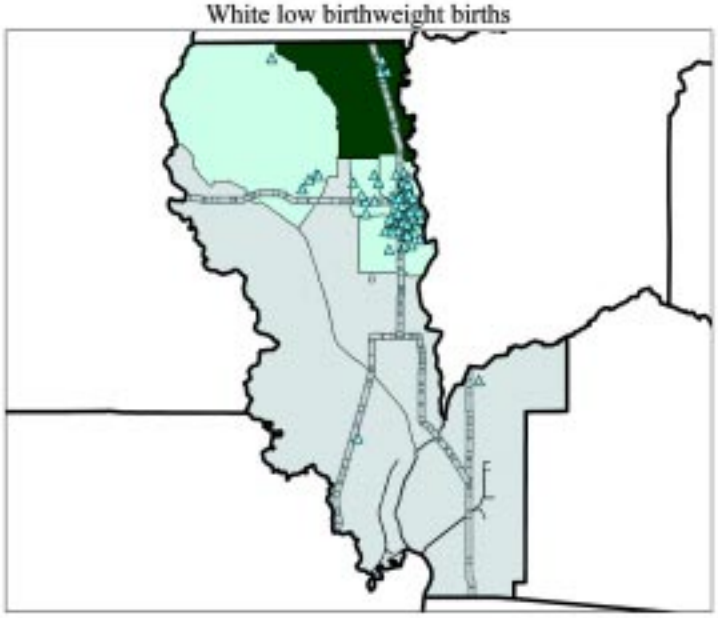
Sutter County



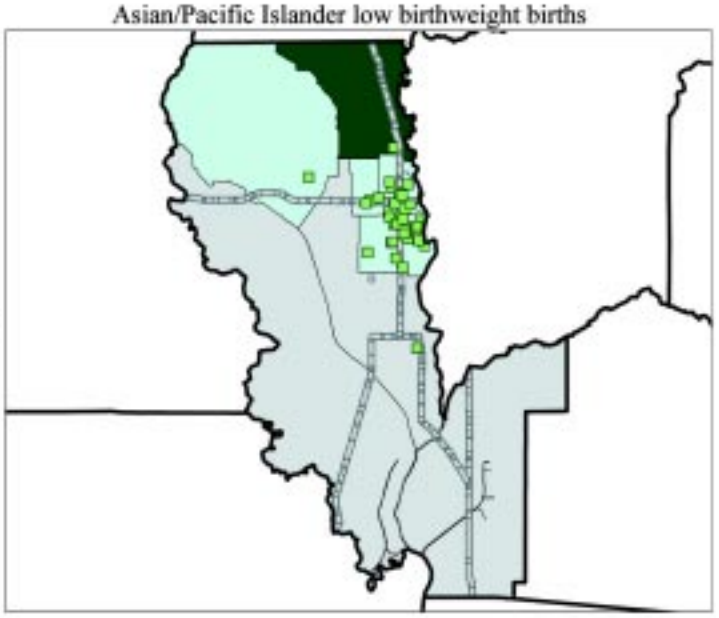
Hispanic low birthweight births



White low birthweight births



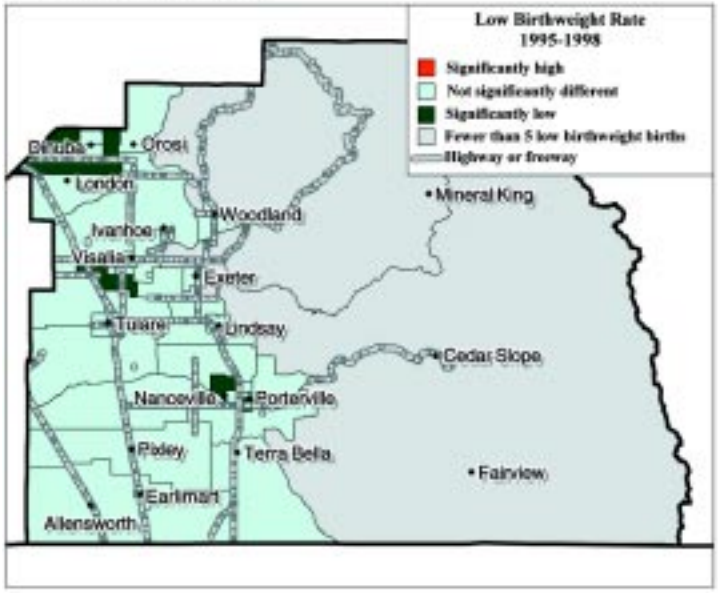
Asian/Pacific Islander low birthweight births



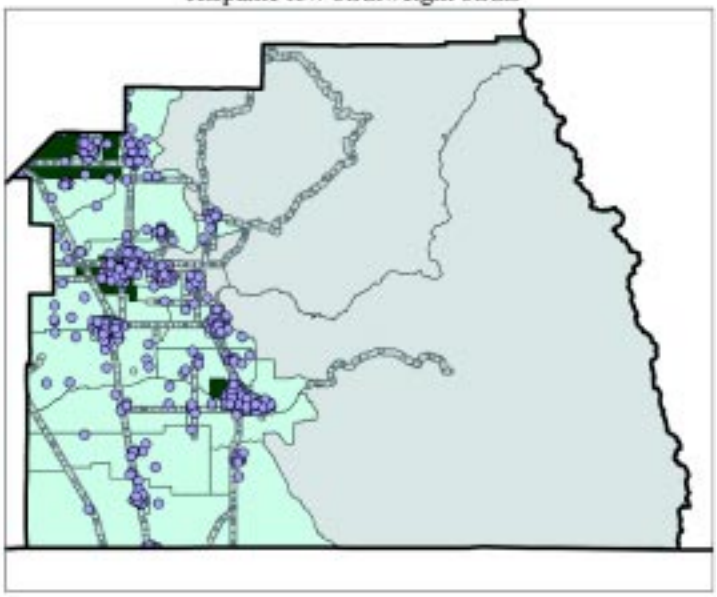
African American low birthweight births

American Indian/Alaska Native low birthweight births

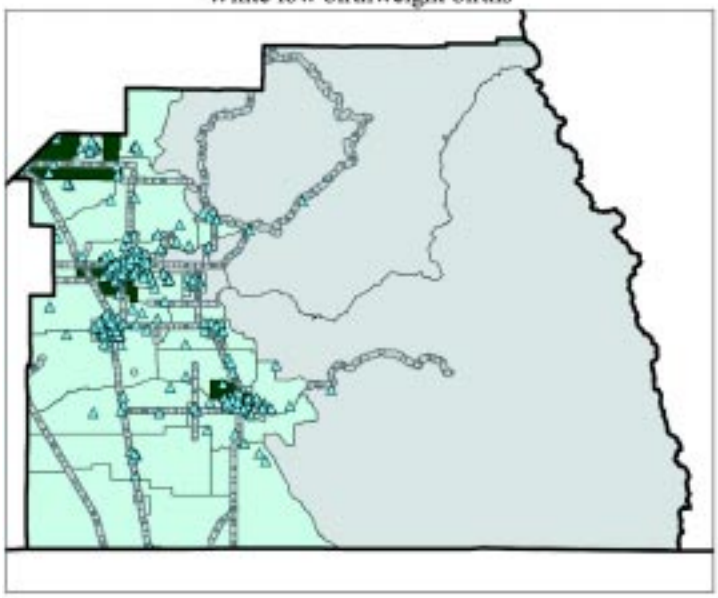
Tulare County



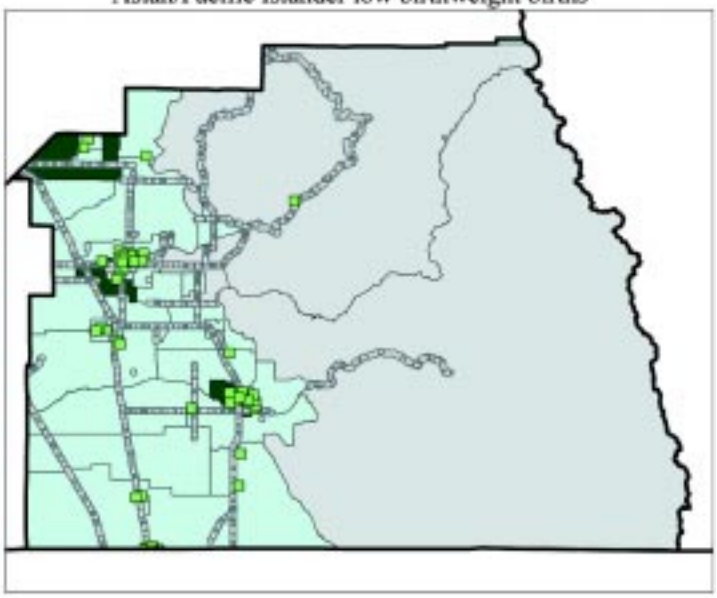
Hispanic low birthweight births



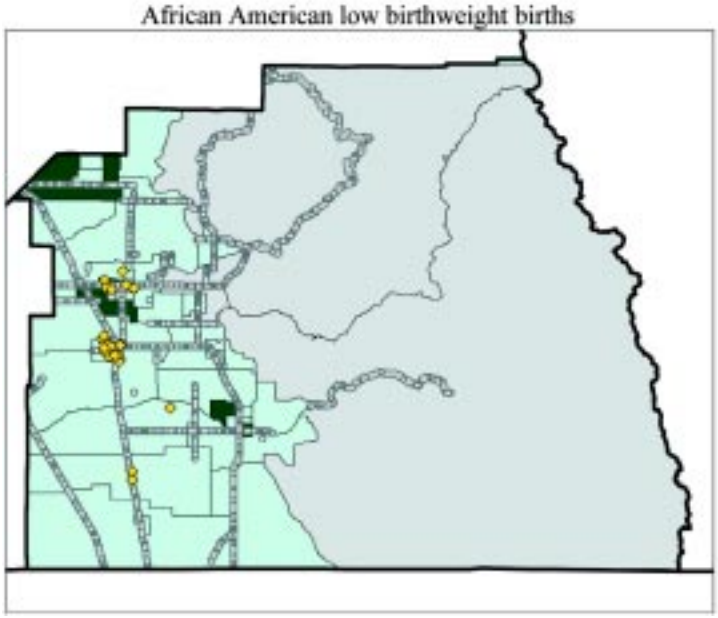
White low birthweight births



Asian/Pacific Islander low birthweight births

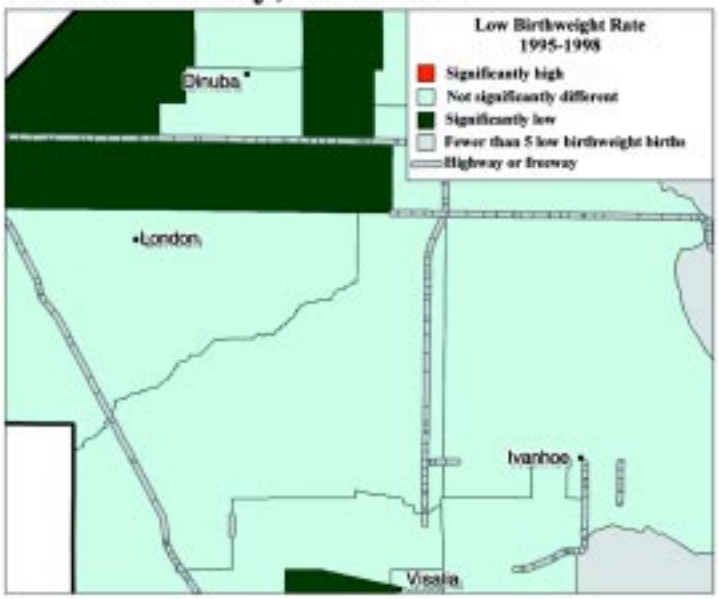


African American low birthweight births

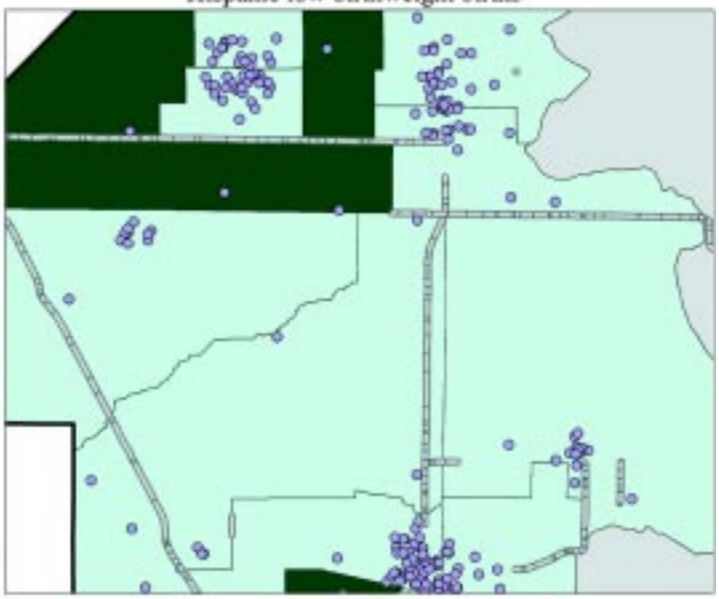


American Indian/Alaska Native low birthweight births

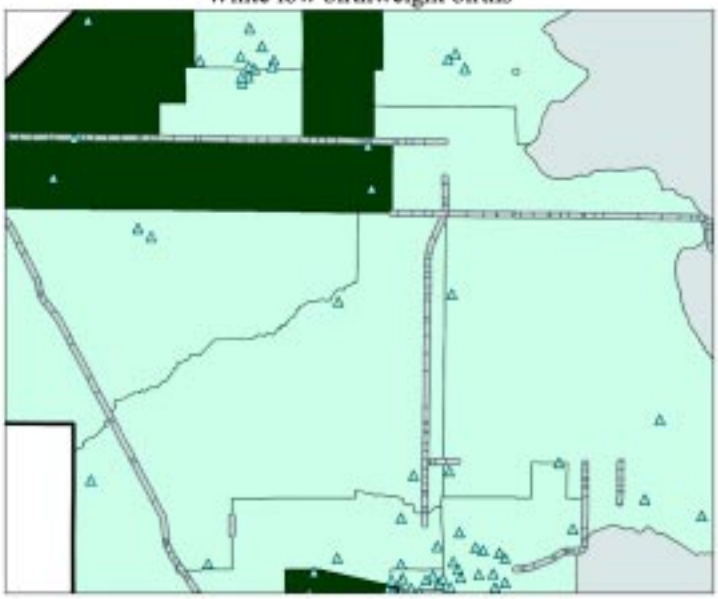
Tulare County, continued



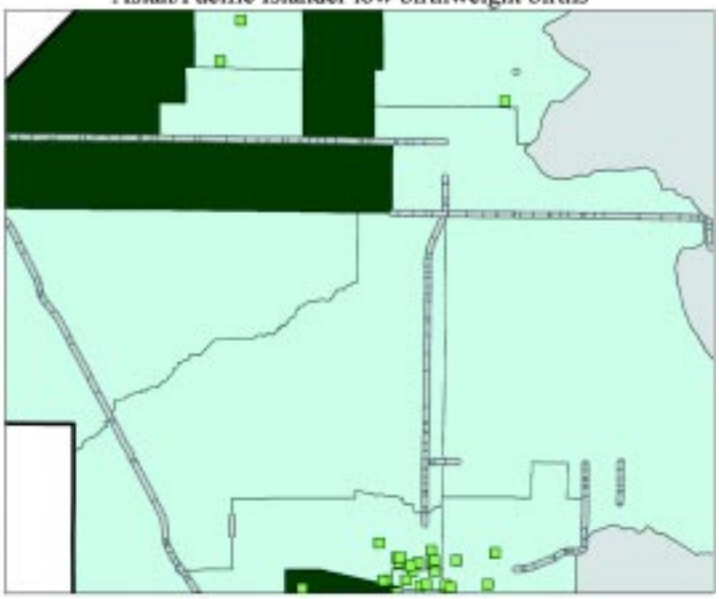
Hispanic low birthweight births



White low birthweight births



Asian/Pacific Islander low birthweight births



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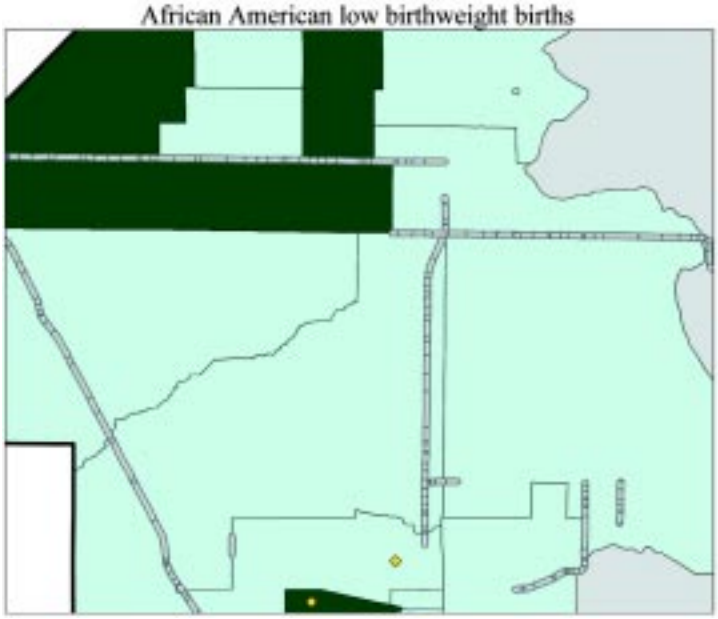

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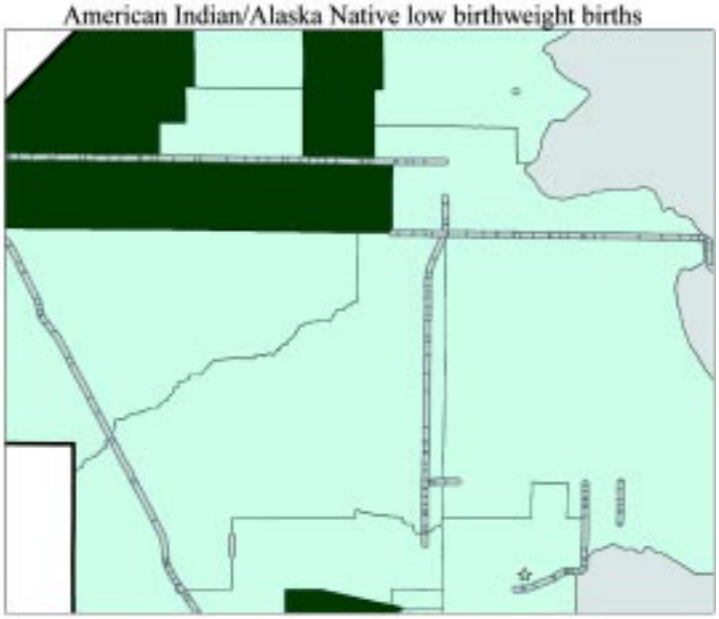

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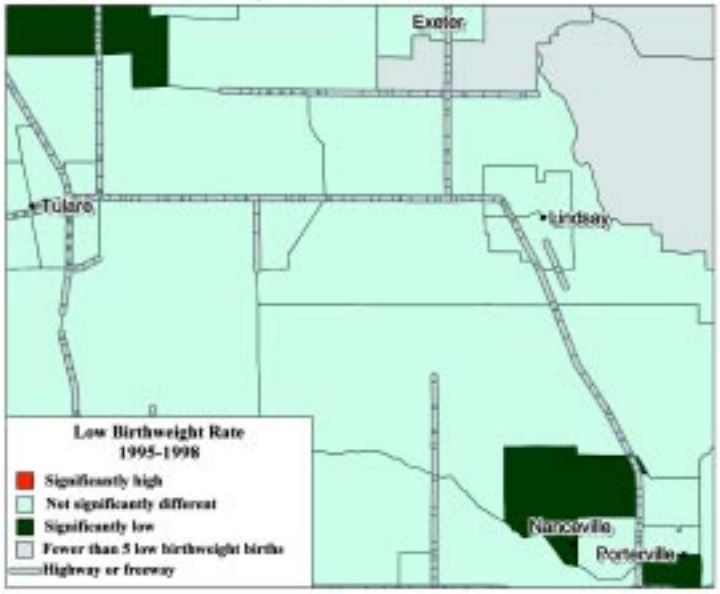

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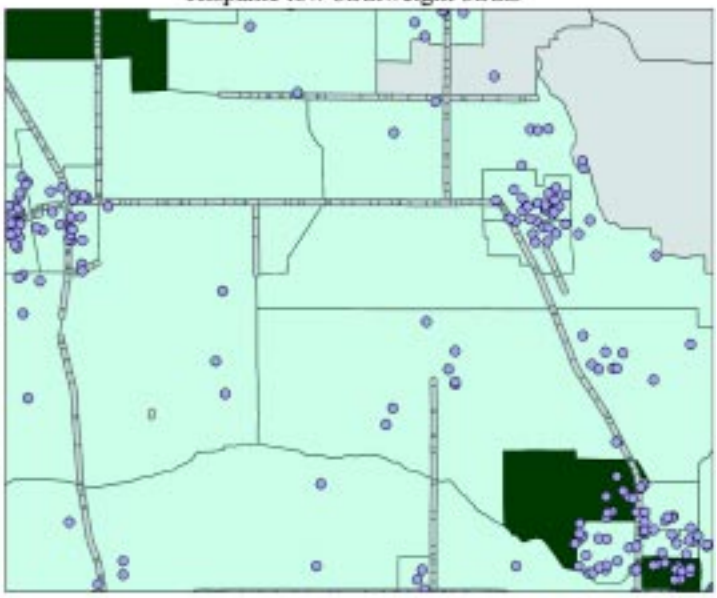

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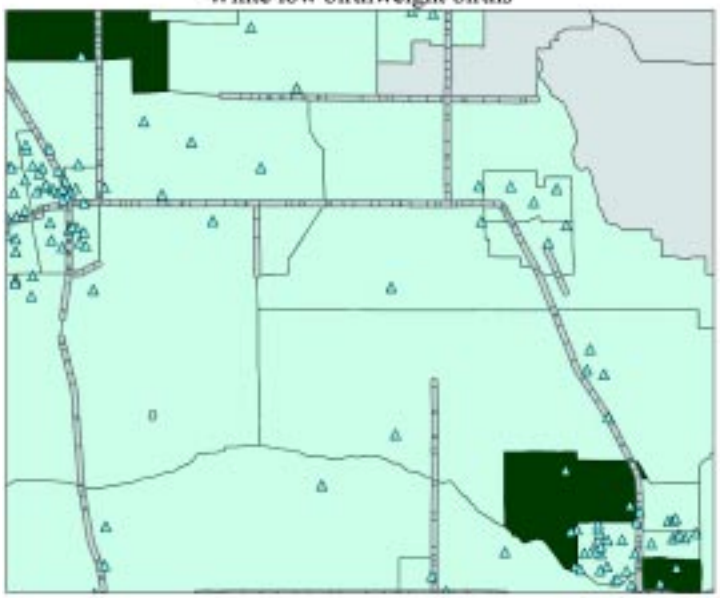

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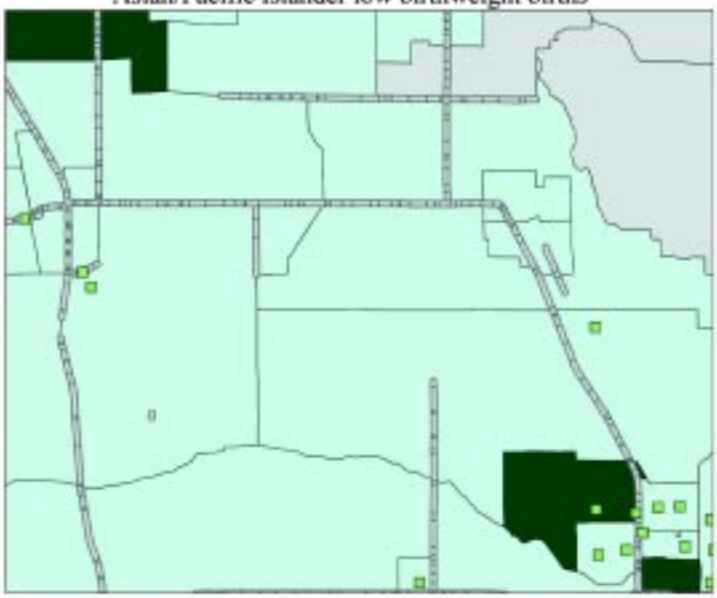
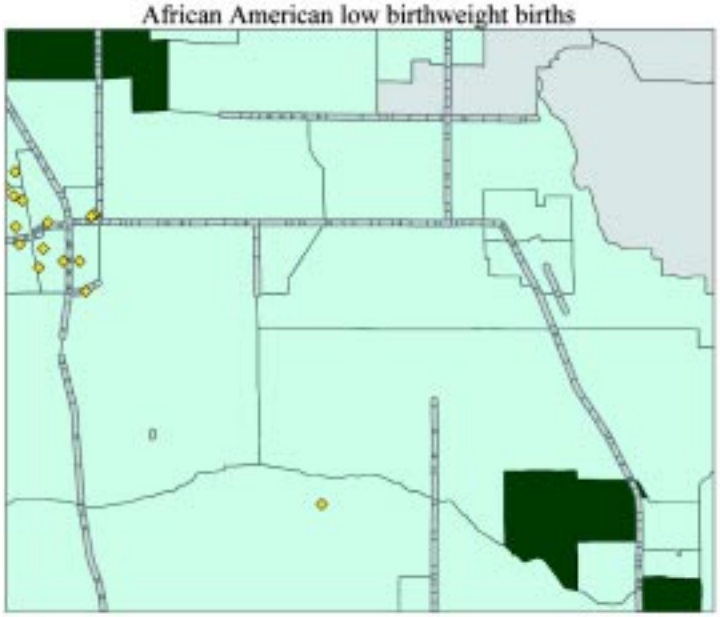


African American low birthweight births



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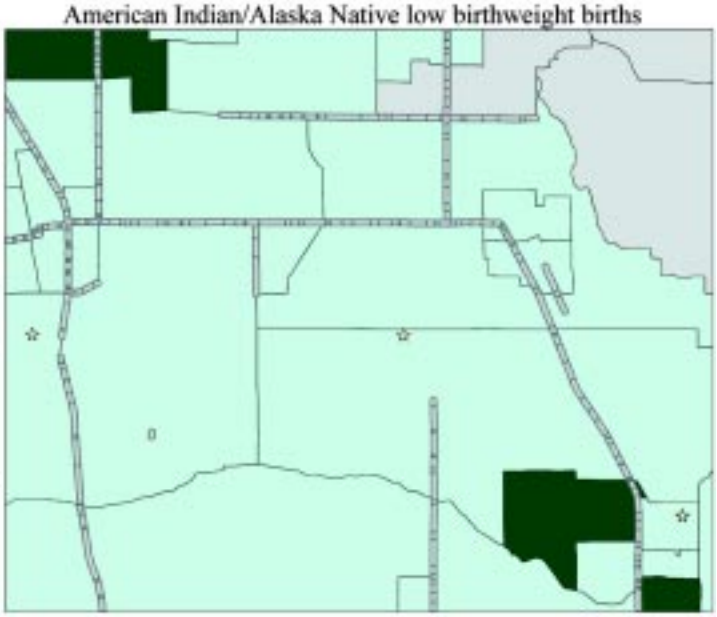
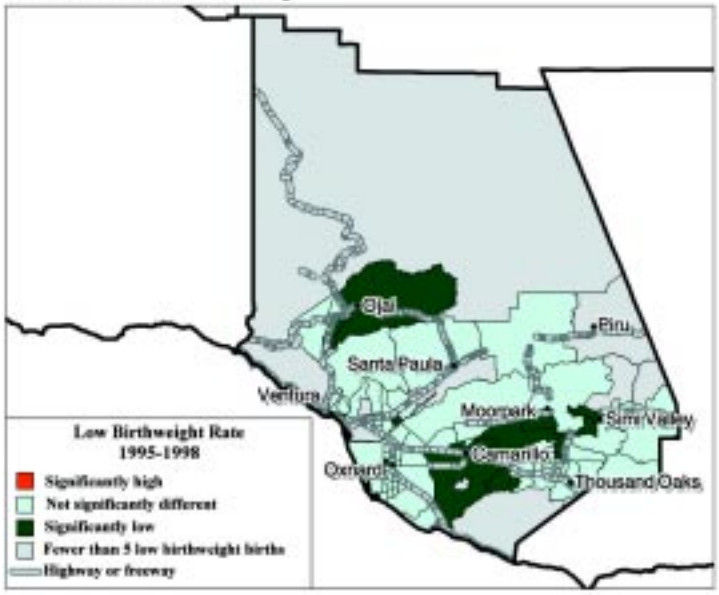


Ventura County



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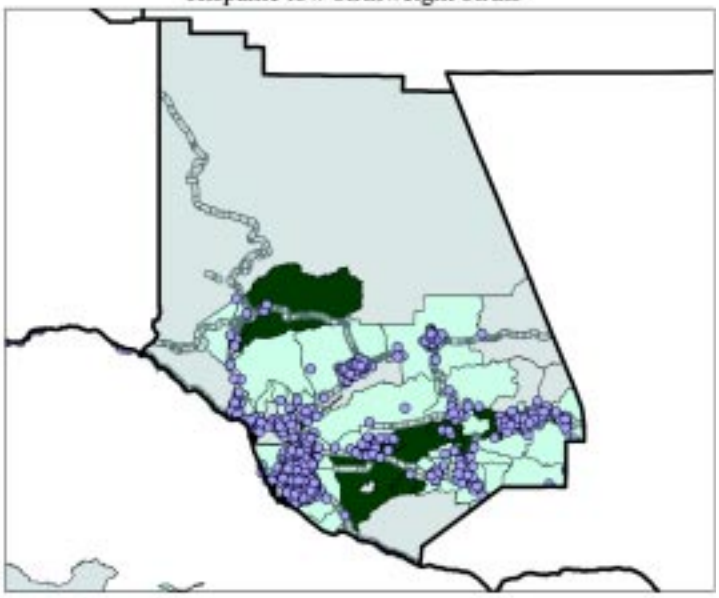
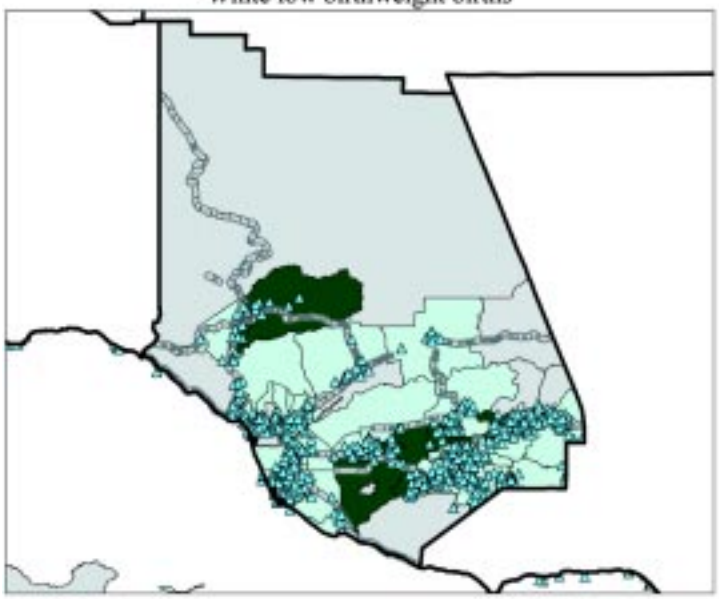
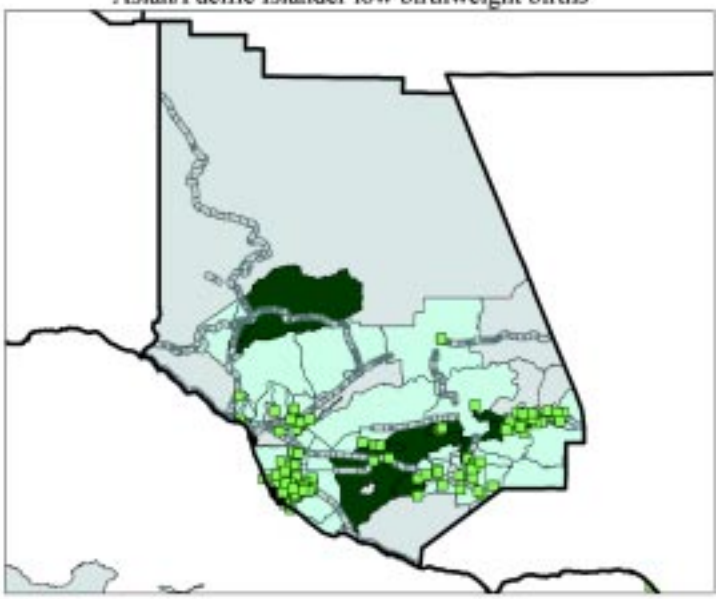


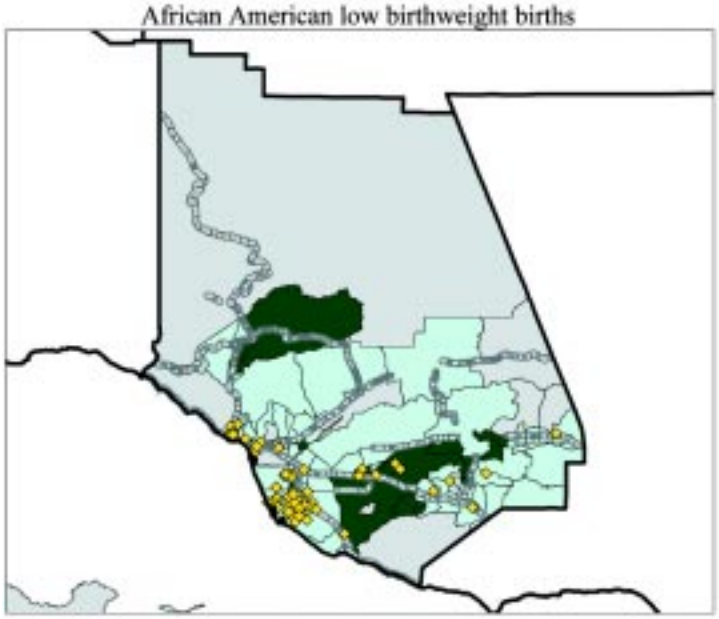
White low birthweight births



Asian/Pacific Islander low birthweight births

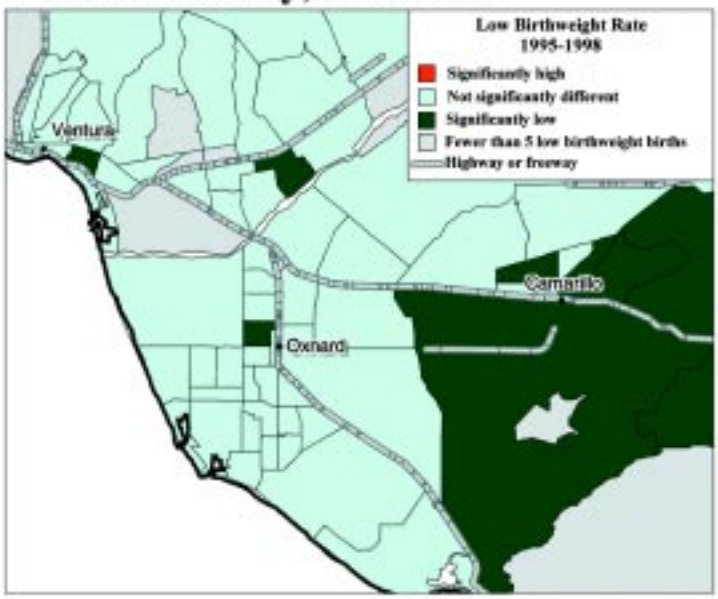


African American low birthweight births

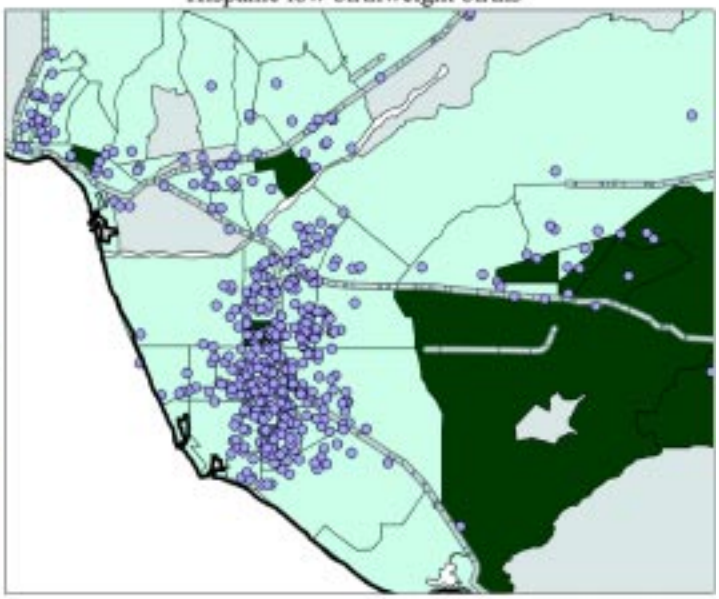


American Indian/Alaska Native low birthweight births

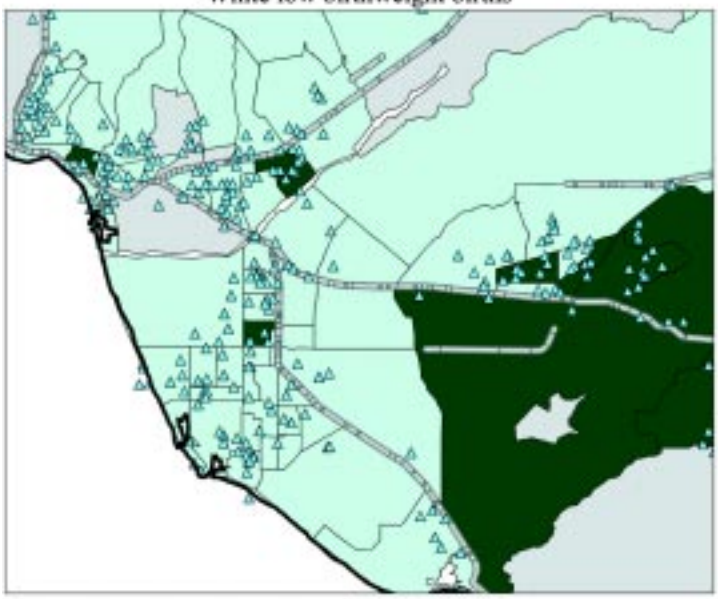
Ventura County, continued



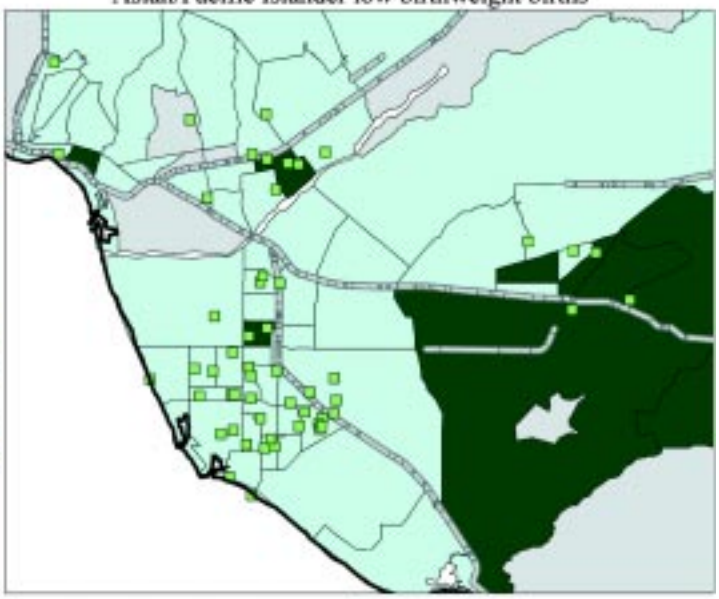
Hispanic low birthweight births



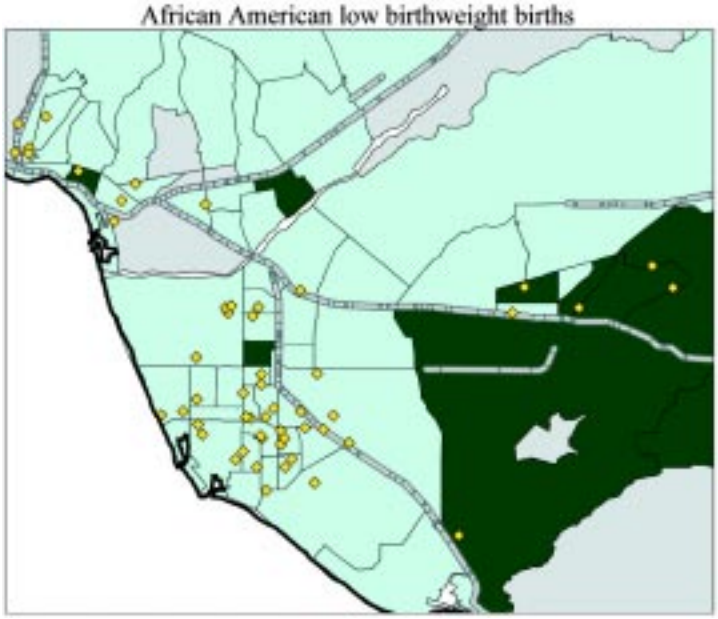
White low birthweight births



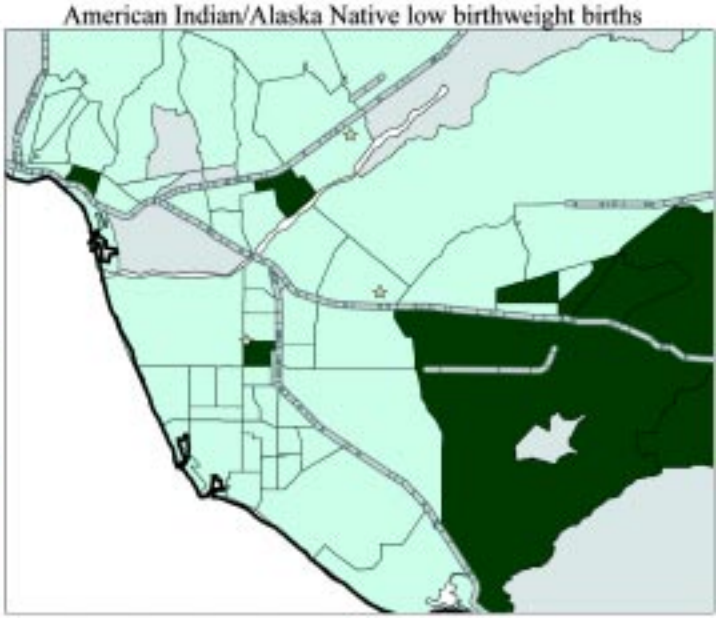
Asian/Pacific Islander low birthweight births



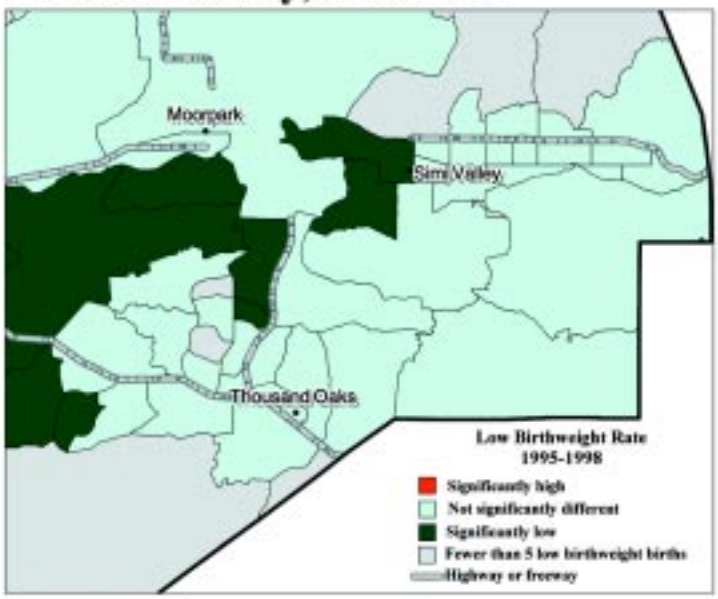
African American low birthweight births



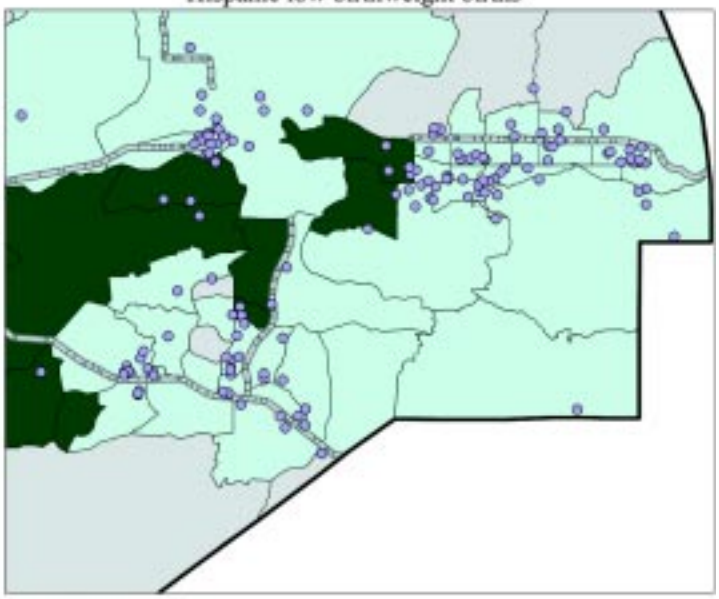
American Indian/Alaska Native low birthweight births



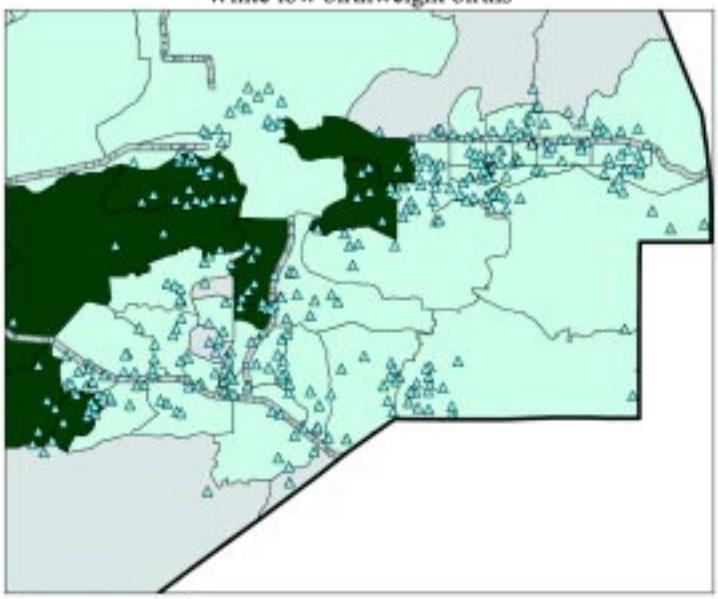
Ventura County, continued



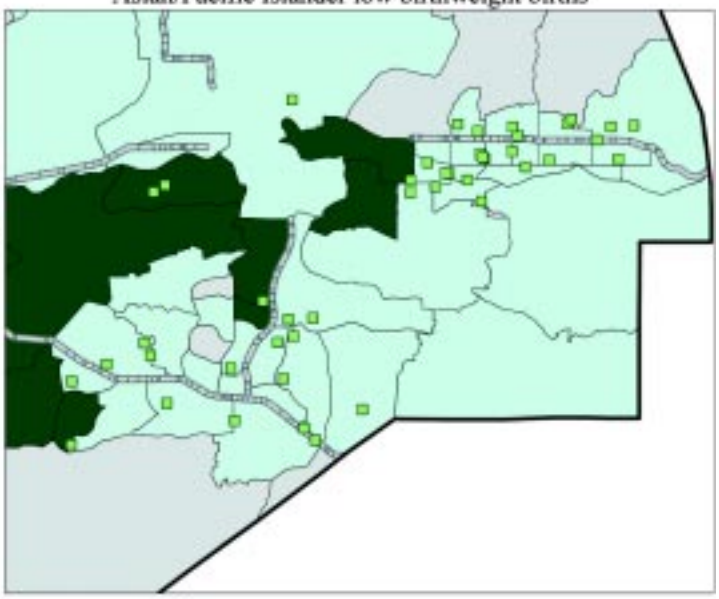
Hispanic low birthweight births



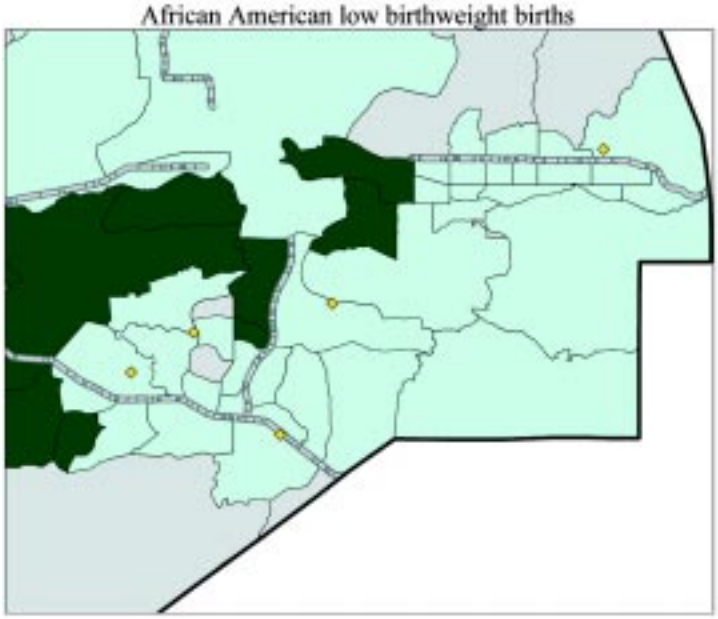
White low birthweight births



Asian/Pacific Islander low birthweight births

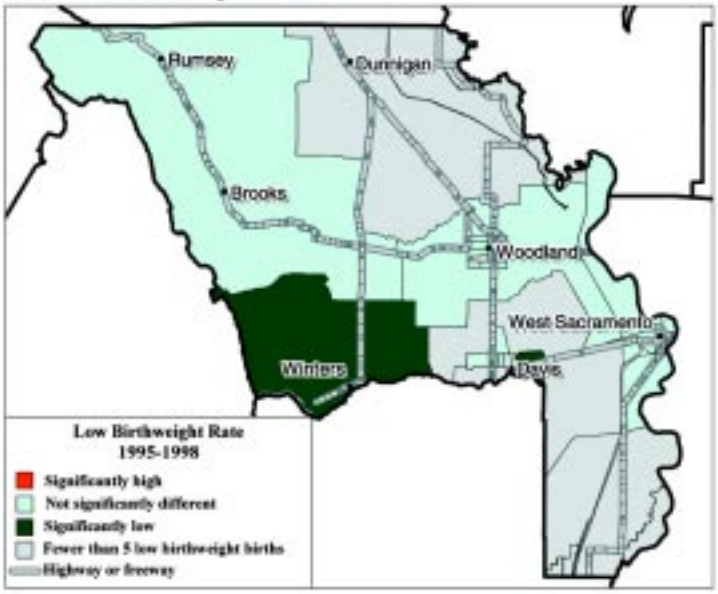


African American low birthweight births

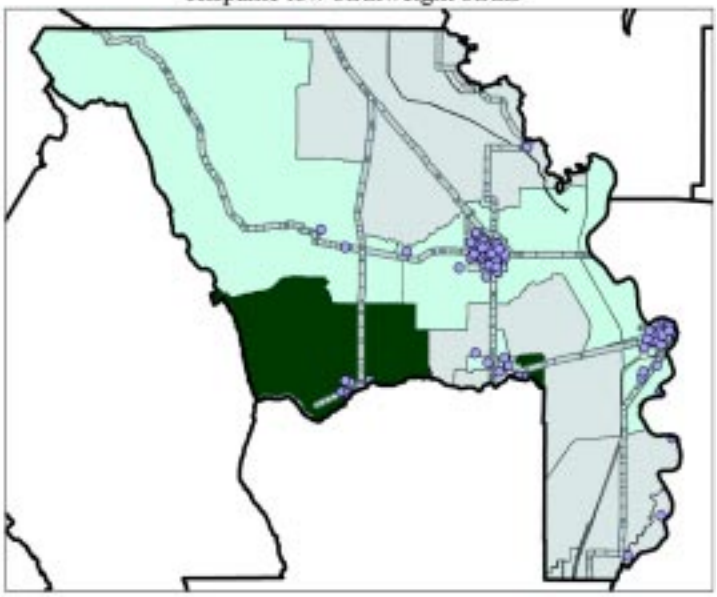


American Indian/Alaska Native low birthweight births

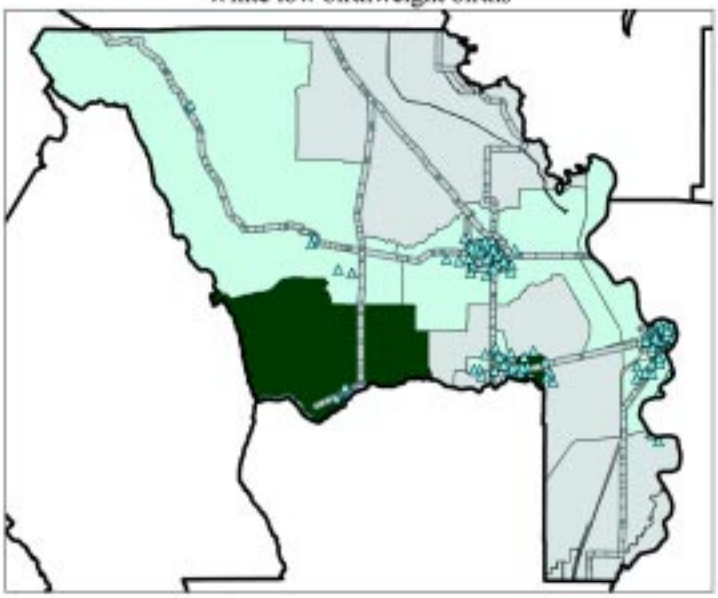
Yolo County



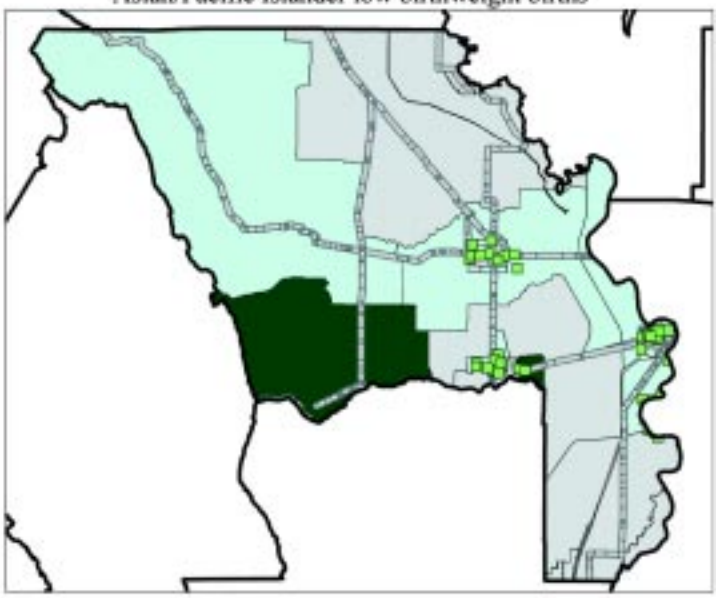
Hispanic low birthweight births



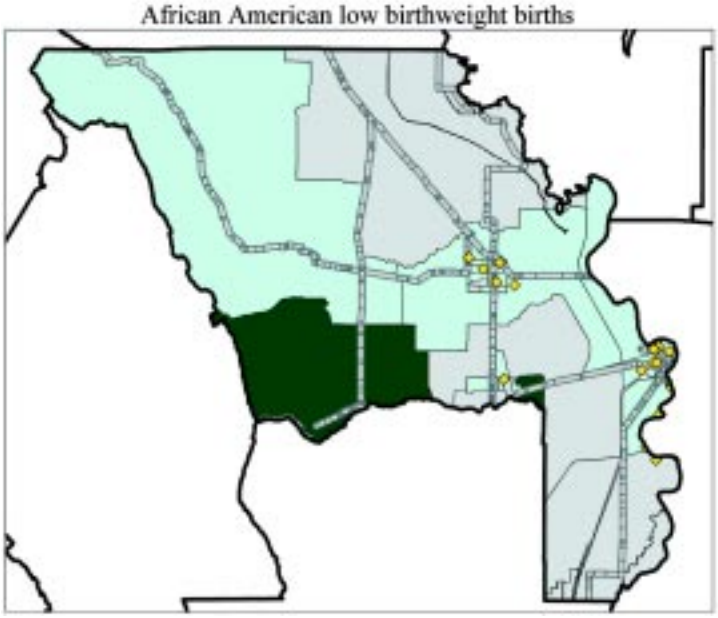
White low birthweight births



Asian/Pacific Islander low birthweight births

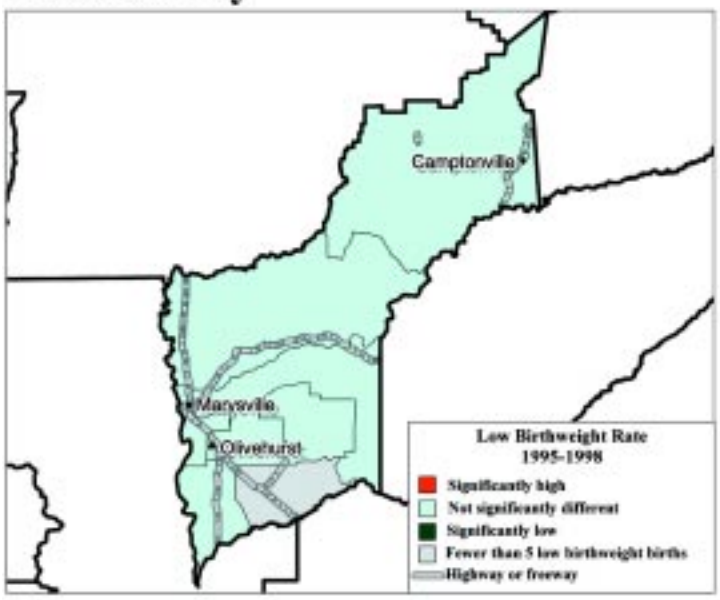


African American low birthweight births

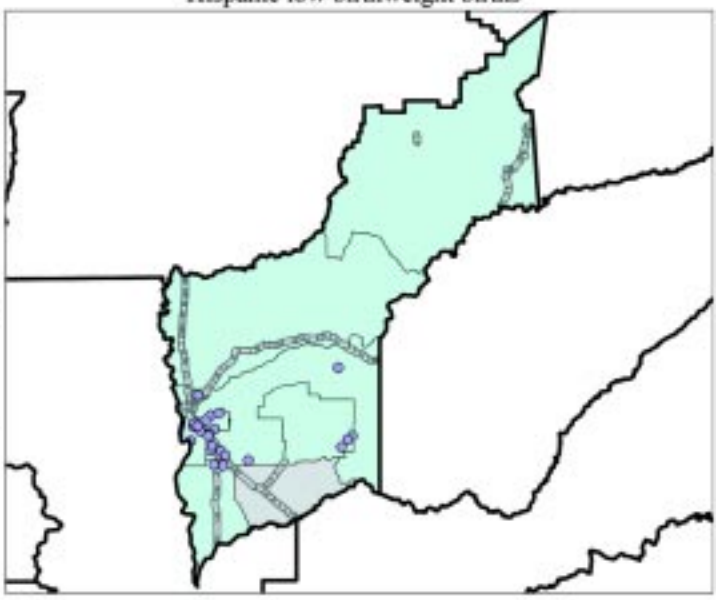


American Indian/Alaska Native low birthweight births

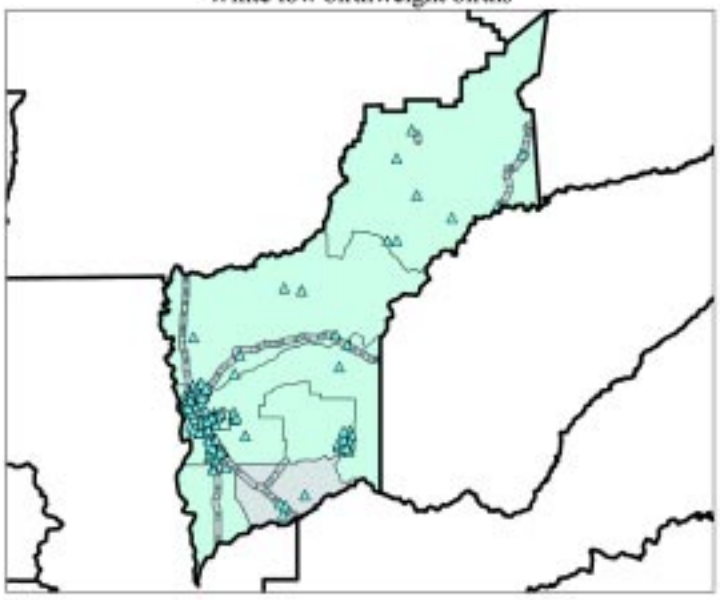
Yuba County



Hispanic low birthweight births



White low birthweight births

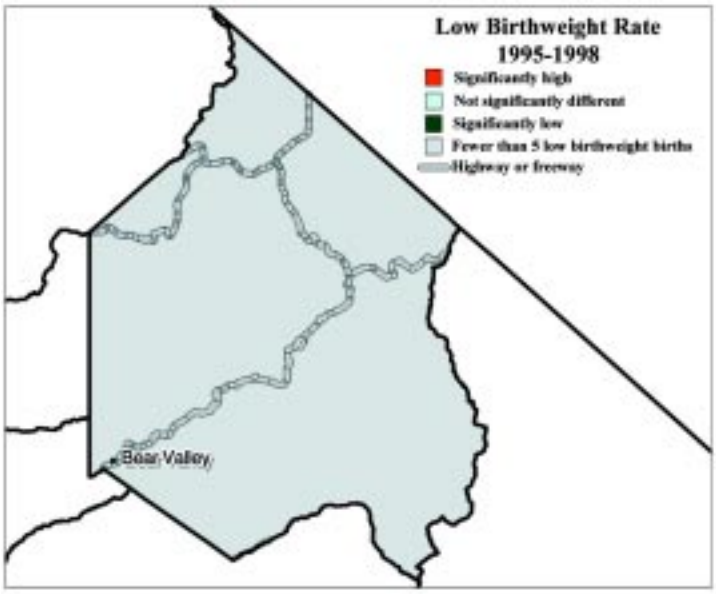


Asian/Pacific Islander low birthweight births

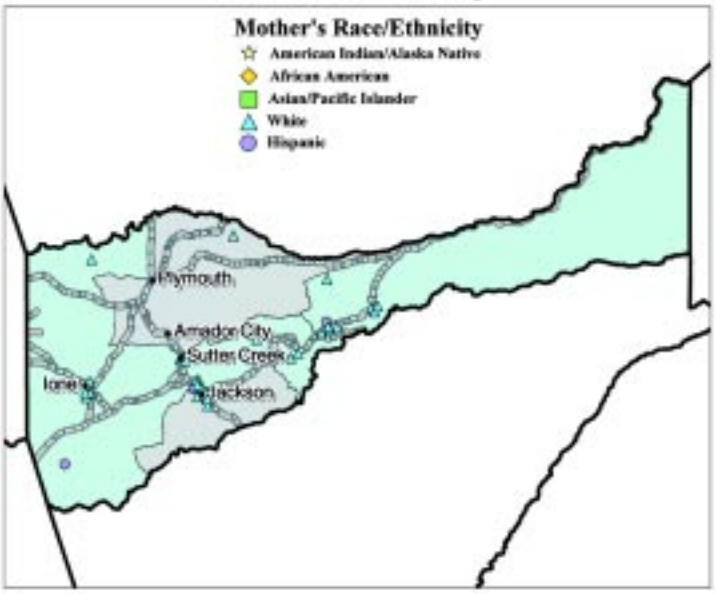
African American low birthweight births

American Indian/Alaska Native low birthweight births

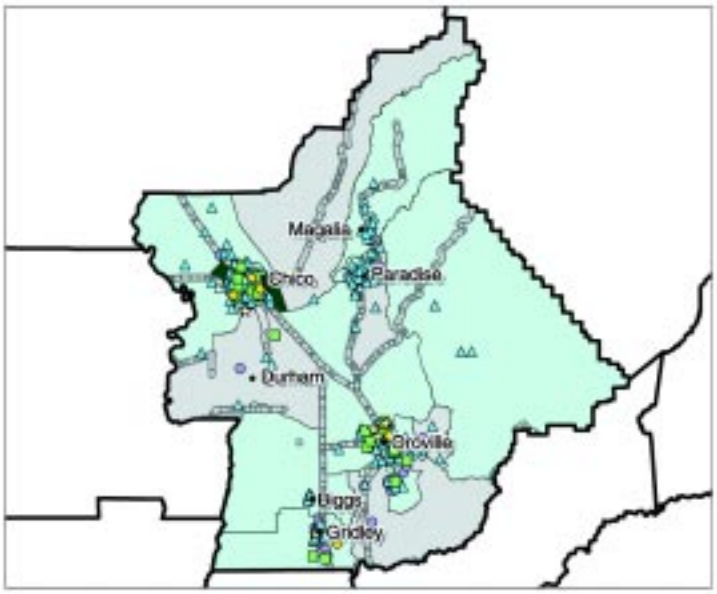
Alpine County



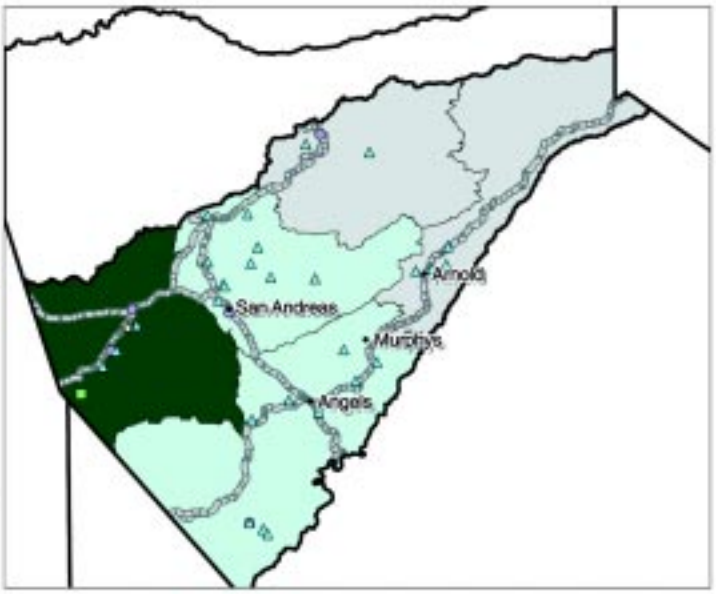
Amador County



Butte County



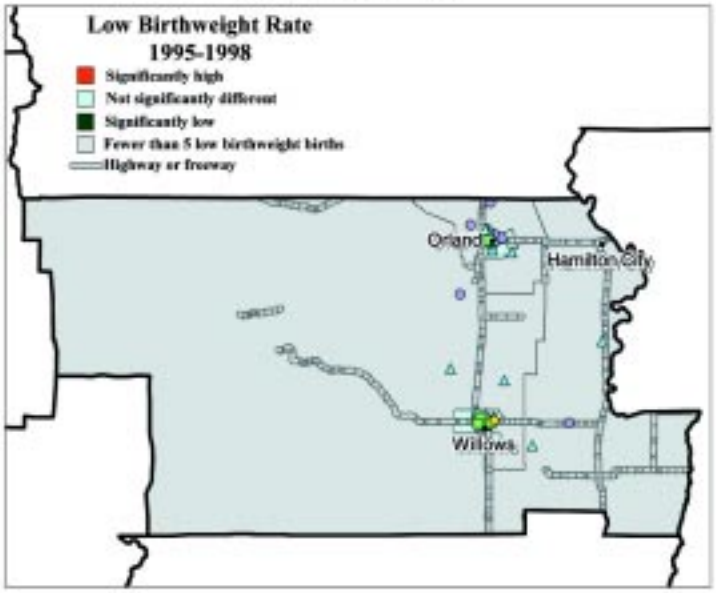
Calaveras County



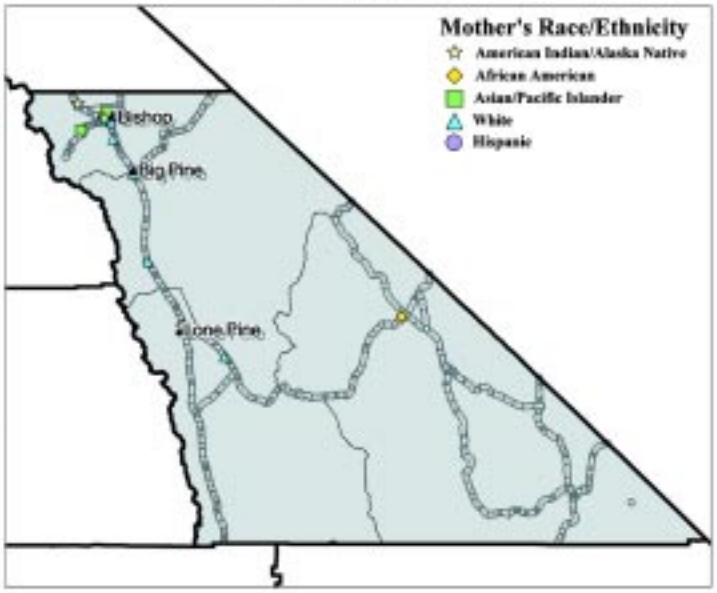
Colusa County

Del Norte County

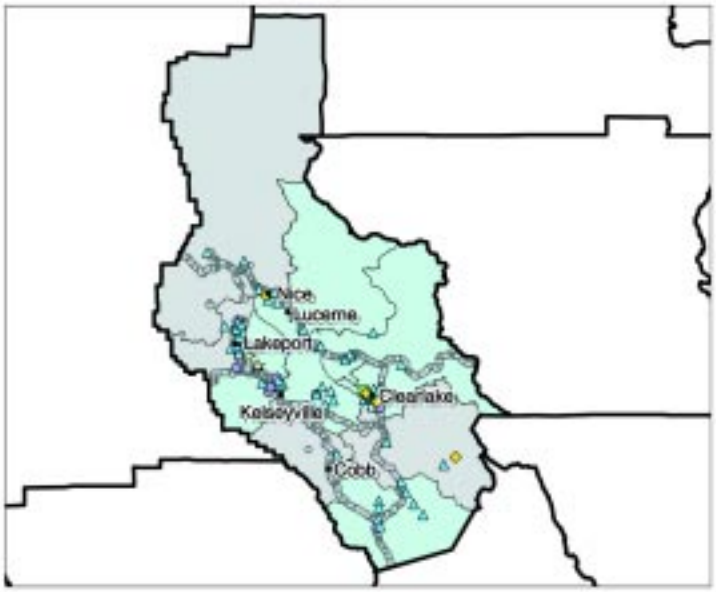
Glenn County



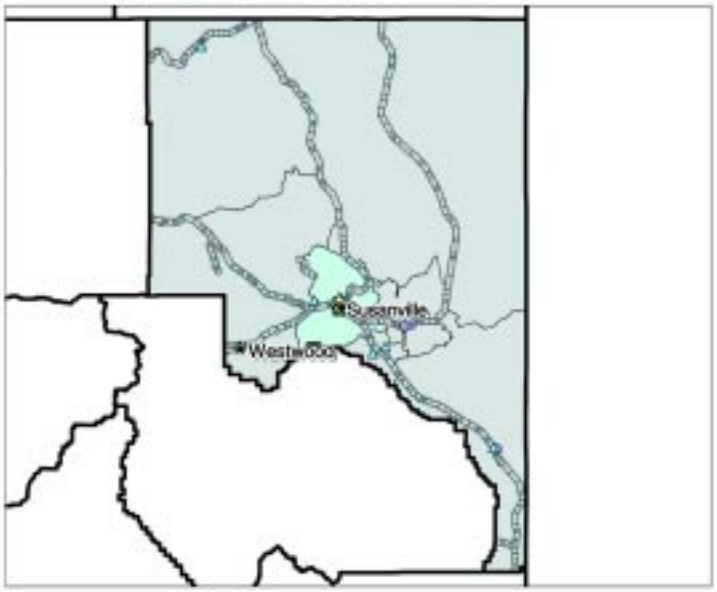
Inyo County



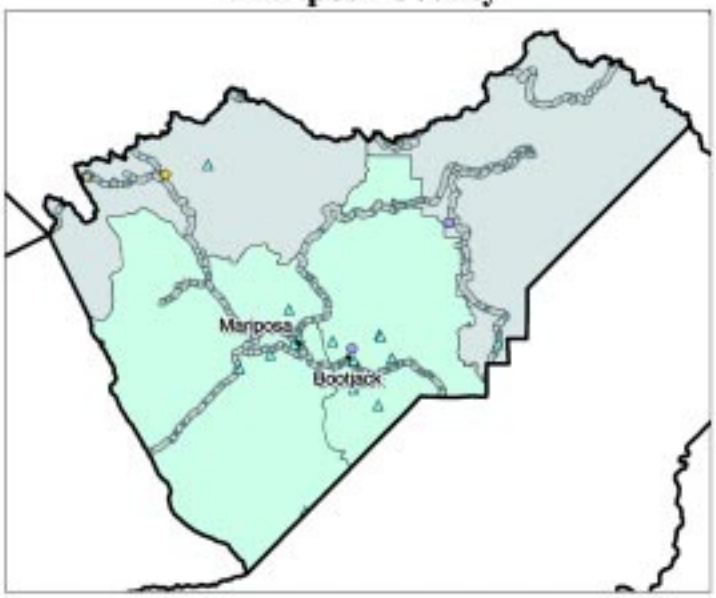
Lake County



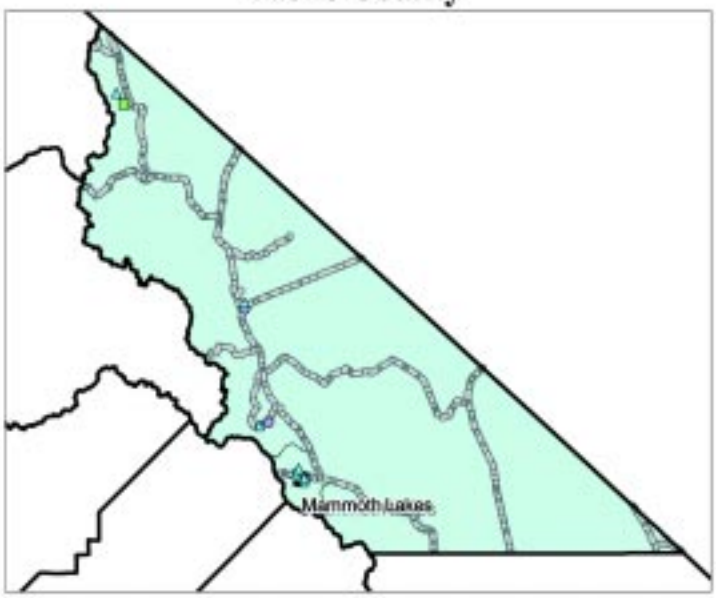
Lassen County



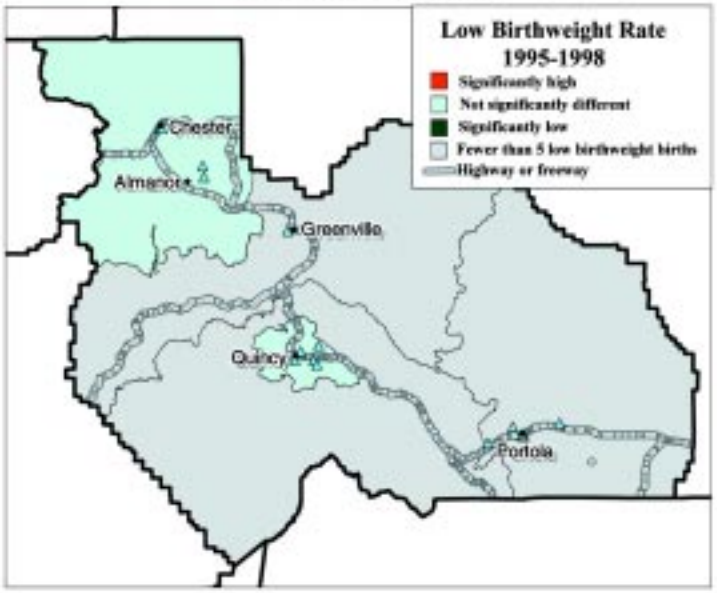
Mariposa County



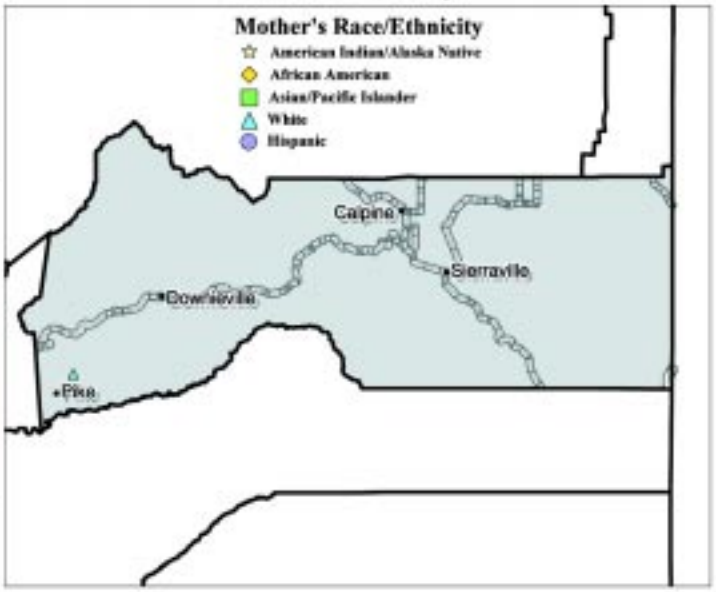
Mono County



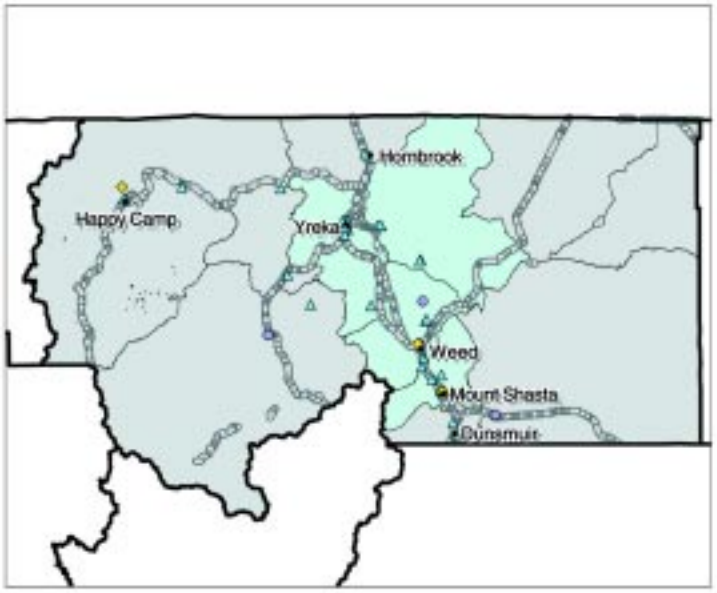
Plumas County



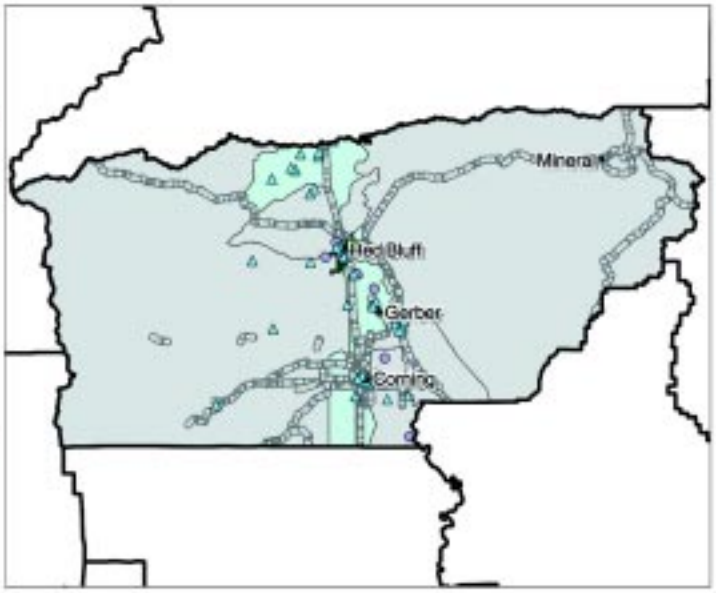
Sierra County



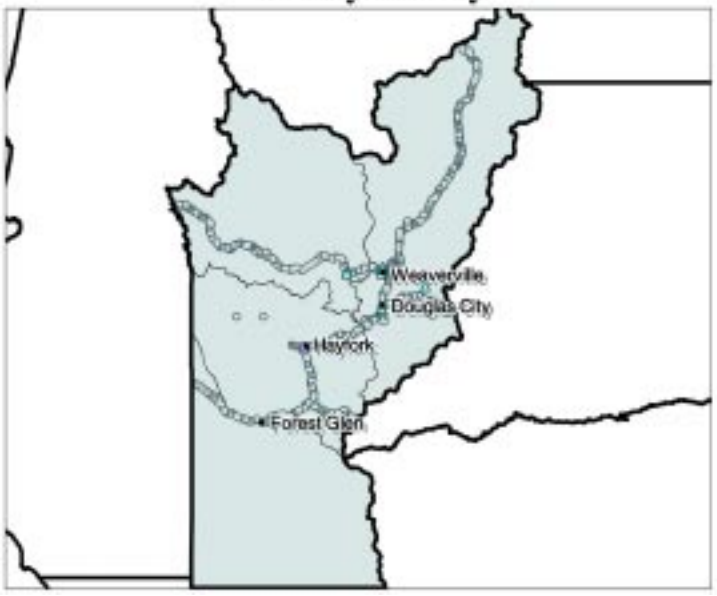
Siskiyou County



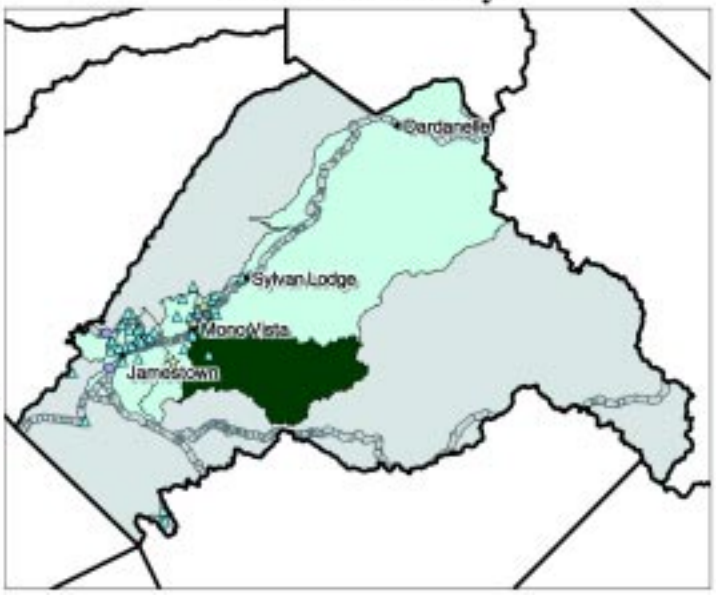
Tehama County



Trinity County

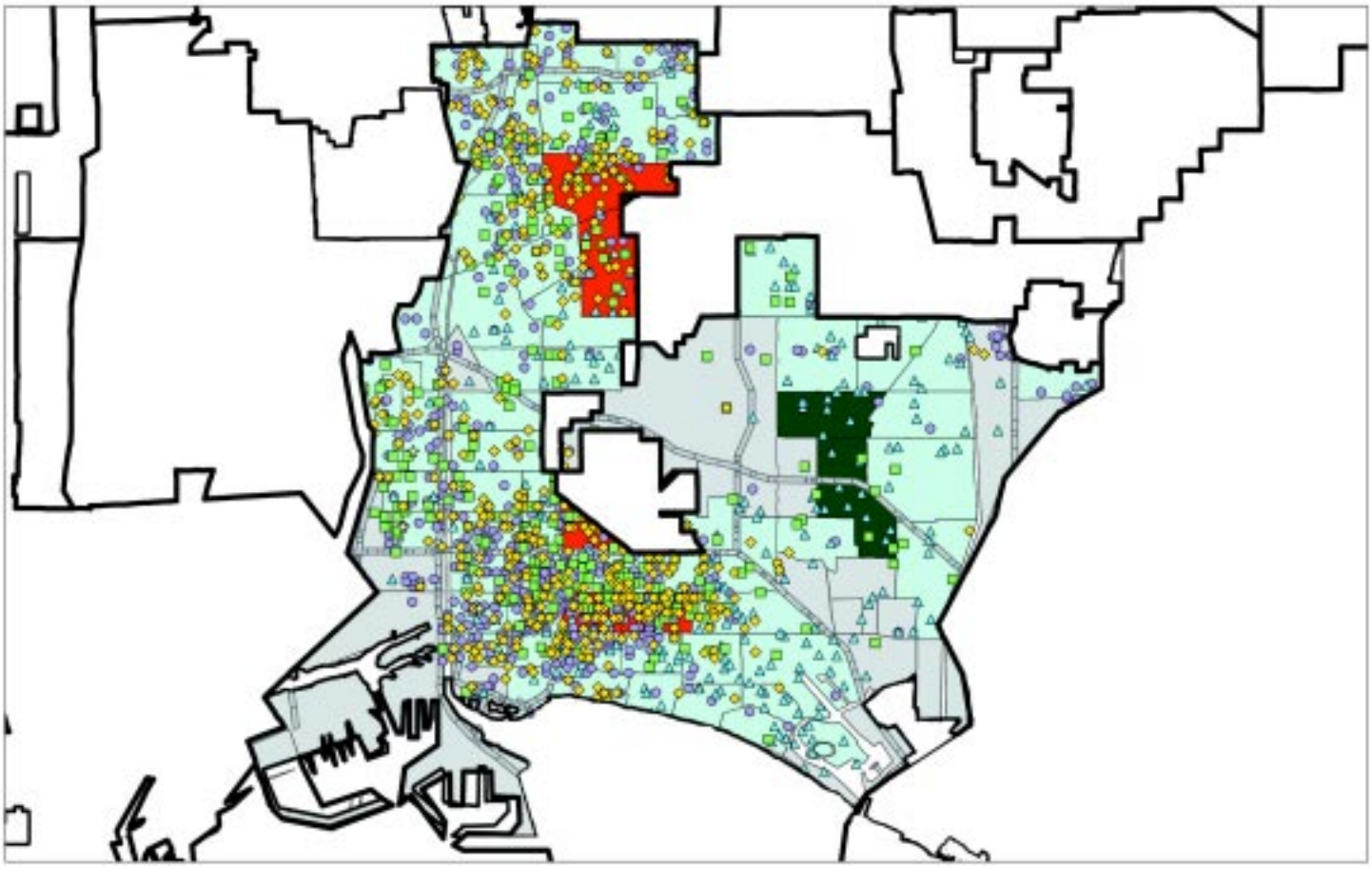


Tuolumne County

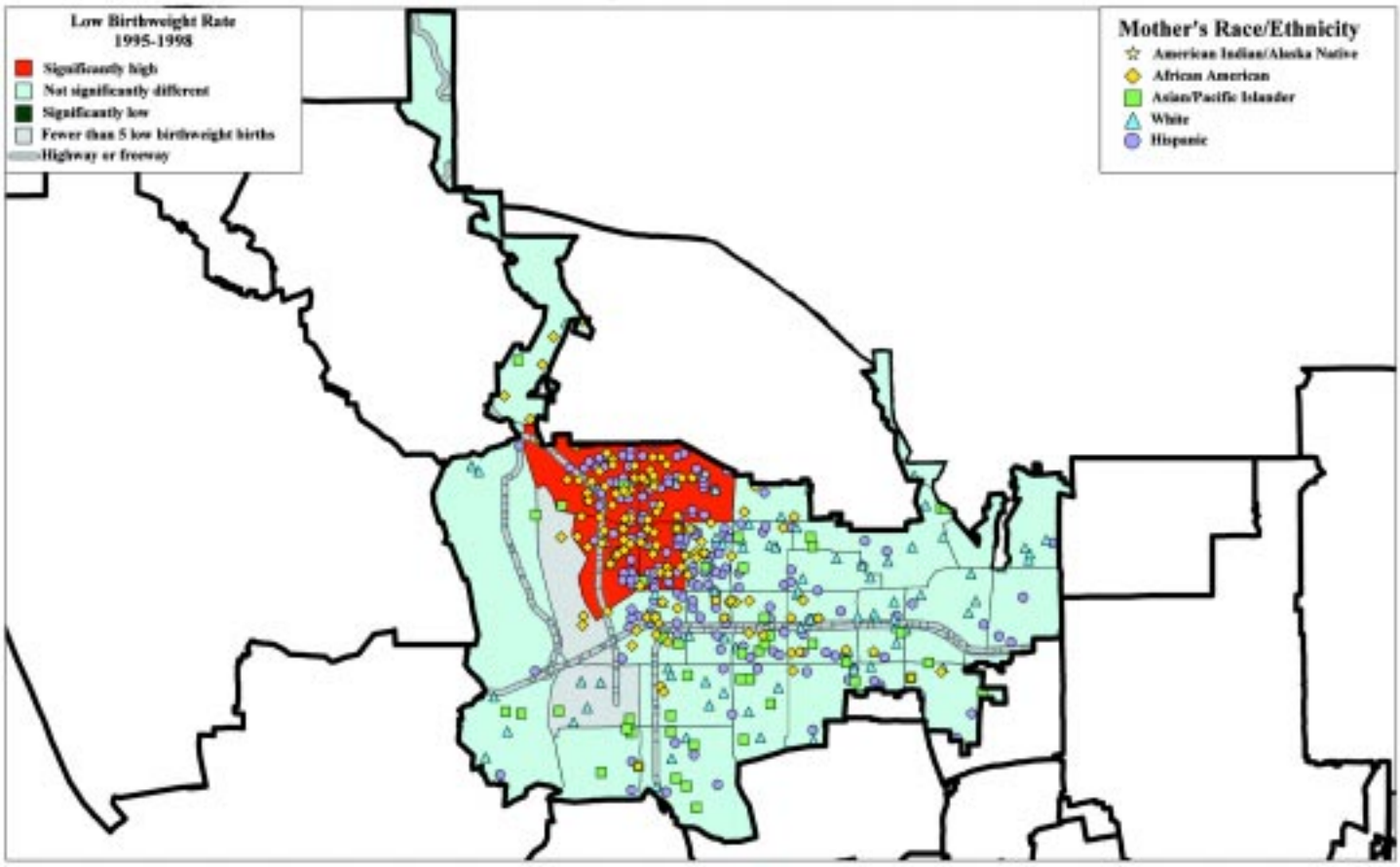


City of Berkeley

City of Long Beach



City of Pasadena



METHODS

This atlas depicts rates of low birthweight by Census tract in California, as well as approximate locations of low birthweight births, for 1995-98. Because low birthweight is a relatively infrequent outcome, we combined four years' worth of birth data in order to increase our power to calculate stable rates and to detect differences between Census tracts in the low birthweight rate for singletons.

Data for the atlas were drawn from the state Automated Vital Statistics System (AVSS) for 1995 through 1998. Data were geocoded using MapMarker 5.1 and analyzed in PC-SAS. The AVSS file is necessary for small-area geographic analysis because it includes the full mother's address; however, AVSS data are somewhat preliminary and the files include most, but not all births. About 96 percent of births in the AVSS data set could be adequately geocoded for the atlas; i.e., geocoded to an exact address or to a ZIP+4 centroid, within three or four houses. Birth rates by county in Table 1, and birth rates included in the background sections, used data from the California Birth Statistical Master files for 1995-98, which constitute the final data as issued by the state Center for Health Statistics.

Geocoded births were overlaid with Census tract boundaries to allow a total count of births and low birthweight births in each Census tract. Low birthweight rates were then calculated for each tract. Statistical significance of rates was assessed using a binomial formula to calculate confidence intervals around the state rate and around the rate in each Census tract; if state and tract rates did not overlap, the difference was considered to be significant. Areas with either significantly high or significantly low rates were identified, as well as areas with rates not significantly different from the state as a whole. Rates were not calculated for Census tracts having less than 5 low birthweight births during the time period.

In order to preserve confidentiality, low birthweight births were again re-geocoded so that locations could be offset to within a mile from their actual location. Maps depict the underlying rate in each Census tract as well as the approximate location of each low birthweight birth.

Additionally, because maternal race and ethnicity is such a strong determinant of low birthweight and because state outreach programs often target specific demographic groups, low birthweight births were divided into the five major race and ethnic categories (Hispanic/Latino, or non-Hispanic: white, Asian/Pacific Islander, African American, or American Indian/Alaska Native). In the maps, births to each race and ethnic group are depicted using different symbols. Underlying rates for each Census tract are for all births, however.

Some counties had very few births. For 18 counties, births were not broken out by race and ethnicity, and they were each shown in a single map. In counties that had very dense distributions of births, maps show close-ups of dense neighborhoods at a map width of 20 miles in order to allow for clearer viewing. Finally, maps for the three cities that have independent city departments of public health (Berkeley, Long Beach and Pasadena) are also included.

Table: Low birthweight by maternal county of residence, 1995-98

Note: this table includes all low birthweight births in each county, including twin and other multiple births.

County	Number of low birthweight births				Percent low birthweight
	1995	1996	1997	1998	
Alameda	1,454	1,440	1,436	1,502	7.0*
Alpine	0	0	0	0	—
Amador	13	11	16	17	5.3
Butte	131	122	103	107	4.9=
Calaveras	28	17	15	12	5.5
Colusa	27	10	14	20	5.7
Contra Costa	744	776	774	794	6.2
Del Norte	14	15	24	15	5.3
El Dorado	96	107	110	86	5.9
Fresno	1,009	947	935	922	6.6*
Glenn	18	16	20	15	4.1=
Humboldt	77	75	59	76	4.8=
Imperial	132	109	115	175	5.3=
Inyo	16	17	11	12	6.6
Kern	787	760	671	717	6.3
Kings	120	141	122	118	5.8
Lake	44	28	32	34	5.8
Lassen	20	7	16	14	4.7=
Los Angeles	11,270	10,761	10,487	10,408	6.5*
Madera	115	109	93	119	5.4=
Marin	133	149	142	135	5.3=
Mariposa	12	5	10	12	6.8
Mendocino	51	57	55	58	5.2=
Merced	245	235	216	211	6.1
Modoc	7	7	5	5	5.8
Mono	11	5	10	6	6.3
Monterey	359	319	371	359	5.2=
Napa	62	59	67	74	4.4=
Nevada	41	48	41	43	5.4
Orange	2,613	2,488	2,521	2,538	5.3=
Placer	143	127	131	133	4.9=
Plumas	10	10	3	3	4.3=
Riverside	1,394	1,440	1,528	1,437	6.2
Sacramento	1,230	1,097	1,190	1,200	6.6*
San Benito	39	39	36	44	4.7=
San Bernardino	2,018	1,941	1,895	1,771	6.6*
San Diego	2,553	2,614	2,518	2,603	5.8=
San Francisco	610	559	541	583	6.9*
San Joaquin	567	578	570	554	6.4*
San Luis Obispo	121	136	134	109	5.0=
San Mateo	586	577	592	685	6.1
Santa Barbara	332	363	336	346	5.9
Santa Clara	1,573	1,599	1,551	1,612	6.0
Santa Cruz	164	150	180	188	4.9=
Shasta	114	102	96	106	5.2=
Sierra	0	0	0	0	—
Siskiyou	37	30	24	23	6.0
Solano	361	366	349	351	6.3
Sonoma	302	299	267	272	5.2=
Stanislaus	427	439	450	454	6.3
Sutter	52	75	73	79	6.0
Tehama	49	34	28	27	5.2=
Trinity	10	7	5	13	7.2
Tulare	397	409	360	393	5.5=
Tuolumne	23	25	27	25	5.4
Ventura	644	609	659	622	5.4=
Yolo	112	119	125	126	5.6=
Yuba	71	65	73	75	6.6
CALIFORNIA	**33,588**	**32,649**	**32,232**	**32,438**	**6.1**

*Significantly higher than the state rate. =Significantly lower than the state rate. —No low birthweight births.

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